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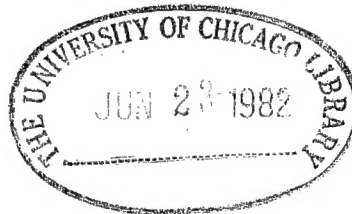


National Institute on Alcohol Abuse
and Alcoholism (U.S.),

Fourth Annual Report

to the United States Congress

fiscal year 1975



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NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

FOURTH ANNUAL REPORT

TO

THE UNITED STATES CONGRESS

FISCAL YEAR 1975

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

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PREFACE

This is a report on the activities of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) during Fiscal Year 1975 required by Public Law 91-616, Section 102(1).

Continued expansion of ongoing programs--as well as several important new initiatives--aimed at combating alcohol abuse and alcohol-related problems marked this fourth full year since the Institute began operations in May of 1971.

Major thrusts during FY 1975 included support of the following goals:

- Initiation of a program of Special Grants to States to implement the provisions of the Uniform Alcoholism and Intoxication Treatment Act.
- Continued expansion of treatment services, with an emphasis on comprehensive community-based treatment programs for special population categories such as women, youth, Blacks, Spanish-Americans, and Native Americans.
- Increased involvement by the private sector, as well as Government, in developing programs for employee rehabilitation.
- Encouragement of community prevention efforts, supplemented by education programs aimed at young people.
- Further research into the complexities of alcohol abuse and alcoholism--in the areas of its prevention, treatment, etiology, and effects.
- Increased availability of training to personnel in the alcoholism field through the establishment of area training resources and award of new training grants.
- New emphasis on implementing accreditation for alcoholism programs marking a major step forward in assuring third-party payment by insurance carriers for alcoholism services.

The Federal resources administered by the NIAAA reached States, communities, and individuals through the activities of its four

operating Divisions: Resource Development*; Special Treatment and Rehabilitation Programs; Prevention; and Research. The NIAAA obligated \$167,569,000 for FY 1975 to support programs throughout the Nation in those areas (see table 1, p.3).

A total of \$52 million was obligated in FY 1975 for the State Formula Grant Program, a decentralized program. In addition to the formula grants, 16 States which had adopted provisions of the Uniform Alcoholism and Intoxication Treatment Act to decriminalize public intoxication received additional grants totaling \$2,679,163 to assist in the implementation of that legislation.

Direct project grants and contracts for prevention, treatment, and rehabilitation totaled \$82,519,000 (see table 2, p.4).

A reorganization within the Institute at the end of FY 1975 resulted in the formation of a new Division of Resource Development, supplanting the Division of State and Community Assistance Programs. The new Division was assigned responsibility for administering the alcohol formula grant program in conjunction with the Regional Offices which administer the formula grants. This Division also has the responsibility for developing policy and regulations for comprehensive State plans for the delivery of alcoholism services; developing training programs; and administering the program of special grants to implement the Uniform Act.

The NIAAA placed a major emphasis in FY 1975 on activities designed to increase health insurance coverage for alcoholism treatment. Perhaps the most important step in the direction of encouraging third-party payments for alcoholism treatment was the development of program accreditation standards by the Joint Commission on the Accreditation of Hospitals, with support from the NIAAA. In FY 1975, the first year of the implementation of these standards, approximately 100 alcoholism treatment programs were accredited. Parallel with this effort, activities aimed at certification of alcoholism counselors were supported by the NIAAA.

In FY 1975 the Institute continued to give high priority to making effective quality treatment available to every alcoholic person in the United States. As one avenue to this goal, the Division of Special Treatment and Rehabilitation Programs placed special

*This Division became operational in FY 1975 and was officially established in early FY 1976.

emphasis in FY 1975 on the development of occupational alcoholism programs and expansion of programs for special population categories such as women, youth, Blacks, Spanish-Americans, and Native Americans.

Area Alcohol Education and Training Programs (AAETPs), established during the previous year in the East, South, Midwest, and West, demonstrated significant achievement in expanding local resources to meet education and manpower development needs in the alcoholism field. In FY 1975, these Institute-supported regional coordinating agencies awarded 93 individual stipends and 68 subgrants from which approximately 10,000 people received short-term training in alcohol-related subjects.

In the area of prevention, the Youth Education Branch of the Division of Prevention expanded its efforts to reach young people. One major programming thrust was an attempt to encourage youth-serving organizations to incorporate alcohol education components into their ongoing programs. A second major target during FY 1975 was college youth. NIAAA representatives visited 62 campuses throughout the Nation to raise awareness of the problems of alcohol abuse and to offer technical assistance in developing programs. In addition, the Institute supported State Prevention Coordinators who implemented alcohol abuse prevention activities in 48 States, resulting in a significant advance in raising public awareness and involvement in alcohol programming.

The Institute's Extramural Research Branch, in response to a wide variety of grant applications, supported 156 projects, half of them dealing with basic and applied biomedical research. Other research projects included behavioral, prevention, and epidemiological studies. Priority areas included research on the fetal alcohol syndrome and the effect of alcohol on the brain, liver, and heart.

The Intramural Research Branch focused mainly on research concerning the metabolic toxicity of alcohol. A program to study behavioral and hormonal factors involved in alcohol use was also initiated during this fiscal year.

The Institute policy to monitor all direct service programs from their inception, to gain early insight into effectiveness and efficiency, produced further evidence during FY 1975 that alcoholism is treatable.

The results of an 18-month followup study of clients treated in NIAAA-funded alcoholism treatment centers showed a 70 percent improvement rate over that timespan. The study also confirmed the value of early intervention through such means as offering alcohol education and counseling to persons arrested on charges of driving while intoxicated.

The NIAAA continued and expanded its emphasis on interagency cooperation and coordination of programs in FY 1975 by participating in joint efforts with the National Institute on Drug Abuse, the Department of Transportation's National Highway Safety Traffic Administration, and others.

Overall, FY 1975 was a year of broadening public and community support for efforts designed to combat the problems of alcoholism and alcohol abuse and a year of increased success in making the fight against alcoholism a major public health priority in this country.

A handwritten signature in dark ink, appearing to read "Ernest P. Noble". The signature is fluid and cursive, with the first name "Ernest" and last name "Noble" clearly distinguishable.

Ernest P. Noble, Ph.D., M.D.
Director
National Institute on Alcohol Abuse
and Alcoholism

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INTRODUCTION

This is the fourth annual report to the Congress on the activities of the National Institute on Alcohol Abuse and Alcoholism (NIAAA). During these 4 years, much progress has been made, as can be seen by reviewing the Institute's history.

Fiscal year 1972 marked the Institute's first full year of operation, a year in which new programs for alcoholic people were developed and public awareness was focused on the magnitude of the problems of alcohol abuse and alcoholism. The NIAAA submitted to Congress the First Special Report on Alcohol and Health, a comprehensive review of existing knowledge in the alcohol field.

In FY 1973, the Institute moved closer to its primary goal of establishing a comprehensive Federal program for the prevention and treatment of alcohol abuse and alcoholism. Recognizing that no illness has ever been eradicated by treating just the casualties, the NIAAA established a Division of Prevention, the first such division in any Federal health agency. In addition, the Institute activated the National Clearinghouse for Alcohol Information to make a variety of information services available to health professionals and the general public. In the treatment sphere, the Institute expanded its focus to give special emphasis to high risk population categories. One such effort involved short-term grants to fund the development of alternatives to alcohol abuse in Alaskan Native willages.

During FY 1974, the Institute continued to foster the development of community-based resources for alcoholism treatment and prevention, and the year was one of significant growth at both State and local levels in response to the awareness and momentum generated by Federal leadership. The establishment of a National Center for Alcohol Education to provide education and training programs marked the expansion of the NIAAA prevention effort. A major thrust in the treatment arena in FY 1974 was the beginning of an intensive effort to enlist the private enterprise system in the Nation's alcoholism effort. The Institute initiated programs to encourage third-party payments for treatment services, and an increasing number of occupational alcoholism programs for employees were developed by business, unions, industry, and Government. The Second Special Report to the U.S. Congress on Alcohol and Health, issued during FY 1974, focused on new knowledge developed during the past few years and marked another step forward in the understanding of the use and misuse of alcohol. Establishment of the NIAAA as a bureau level Institute within the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), newly formed, in accordance with 42USC3511, section 1201 of P.L. 93-282, provided significant new impetus to the national alcohol effort.

In FY 1975, many of the Institute's activities began to produce demonstrable results. Institute-supported accreditation guidelines for treatment programs were implemented by the Joint Commission on Accreditation of Hospitals, a significant milestone both in assuring quality care for alcoholism clients and in encouraging expanded third-party payments for alcoholism care. Incentive contracts were awarded to a limited number of treatment facilities operated through private enterprise to demonstrate the feasibility of providing self-sustaining alcoholism treatment services through the third-party payment system.

Occupational alcoholism programs were further expanded in FY 1975. More than 275 new occupational programs were established by employers in the private and public sectors, independent of NIAAA funding, to serve a work force of nearly 2,750,000 people. Significant partnerships were established between the NIAAA and other Federal agencies to foster Congressionally mandated occupational programs for Federal employees and servicemen with alcohol-related problems.

The Institute also initiated a program of Special Grants to States to implement the provisions of the Uniform Alcoholism and Intoxication Treatment Act.

The Institute continued to support and stimulate a broad-based approach to research, prevention, training, education, and treatment, emphasizing the partnership of Government with private enterprise and citizen groups. This annual report to Congress reflects the activities and commitment of the NIAAA during FY 1975.

TABLE 1. NIAAA program obligations, FY 1975

<u>Programs</u>	<u>FY 1975 Appropriations</u>	<u>FY 1973 Impounded funds</u>	<u>FY 1975 Obligations</u>
Research	\$ 11,008,000	\$ 91,000	\$ 11,099,000 <u>1/</u>
Training	7,847,000	3,573,000	11,420,000
Community:			
Project grants and contracts	64,908,000	17,611,000	82,519,000 <u>2/</u>
State formula grants	<u>52,000,000</u>	<u>---</u>	<u>52,000,000</u> <u>3/</u>
Subtotal	116,908,000	17,611,000	134,519,000
Management and information:			
Direct operations	4,835,000	<u>---</u>	4,835,000
Project contracts	<u>5,491,000</u>	<u>205,000</u>	<u>5,696,000</u>
Subtotal	10,326,000	205,000	10,531,000
Total obligations	\$146,089,000	\$21,480,000 <u>4/</u>	\$167,569,000

1/ \$10,681,000 - Extramural research
\$ 418,000 - Intramural research

2/ See table 2

3/ See table 5

4/ Does not include \$65,000 obligated for court costs.

TABLE 2. Community project grants and contracts, FY 1975

Grants and contracts	FY 1975 Appropriation		FY 1973 Impounded		Total	
	Number of awards	Amount	Number of awards	Amount	FY 1975 Obligations	Number of awards
Treatment grants:						
Staffing grants	44	\$ 10,423,000	--	--		44 \$ 10,423,000
Occupational grants	18	2,046,000	7	\$ 1,300,000		25 3,346,000
Indian grants	120	12,634,000	28	4,007,000		148 16,641,000
Drinking driver grants	11	1,792,000	6	897,000		17 2,689,000
Poverty grants	169	15,032,000	3	294,000		172 15,326,000
Project demonstration grants (see table 3 for details)	47	10,721,000	31	7,092,000		78 17,813,000
Public inebriate grants	5	1,038,000	6	1,754,000		11 2,792,000
Subtotal--treatment grants	414	53,686,000	81	15,344,000		495 69,030,000
Prevention grants:						
Youth education grants	11	1,884,000	7	966,000		18 2,880,000
Community prevention grants	12	2,001,000	16	1,018,000		28 3,019,000
Subtotal--prevention grants	23	3,885,000	23	2,014,000		46 5,899,000
Uniform Act grants	16	2,679,000	--	--		16 2,679,000
Contracts	13	4,658,000	4	253,000		17* 4,911,000*
Total grants and contracts	466	\$ 64,908,000	108	\$ 17,611,000 1/		574 \$ 82,519,000

1/ Does not include \$65,000 obligated for court costs related to FY 1973 fund impoundment.

- 3 - \$1,449,000 Div. of Special Treatment & Rehabilitation
- 9 - 2,304,000 Office of Program Development and Analysis
- 2 - 261,000 Div. of Prevention (\$250,000 & \$11,000)
- 2 - 750,000 Div. of Resource Development
- 1 - 147,000 Office of the Director

*\$4,911,000

NATIONAL ADVISORY COUNCIL ON ALCOHOL ABUSE AND ALCOHOLISM

MANDATE

During FY 1975, the National Advisory Council on Alcohol Abuse and Alcoholism continued to provide consultation, advice, recommendations, and other assistance to the Secretary of Health, Education, and Welfare and to the Administrator of the Alcohol, Drug Abuse, and Mental Health Administration regarding the policies and programs in the area of alcohol abuse and alcoholism. The Council is chaired by the Director, NIAAA, by delegated authority of the Secretary through the Administrator of ADAMHA.

ACCOMPLISHMENTS

The Council's major contributions have been the provision of consistently high-level policy and the assurance of high quality review and recommendations on applications for grants to support research, training, prevention, community assistance, occupational, and special project activities.

In FY 1975, the Council reviewed a total of 1,144 applications requesting funds in the amount of \$186,427,787. Of these 1,144 applications, 508 applications requesting a total of \$70,237,856 were recommended for approval in the amount of \$61,437,382 -- and 499 applications amounting to \$93,758,902 were recommended for disapproval. One hundred and thirty-seven applications requesting a total of \$22,431,029 were deferred.

During FY 1975, the Council made significant contributions toward the review of policy and issues related to the functions of the National Institute on Alcohol Abuse and Alcoholism including the following:

- Encouraged the revision of the Federal Criminal Code to provide explicitly that alcoholism is a defense to prosecution under Federal law to the same extent and under the same conditions as any other illness considered in the Code. Such legislation would substitute appropriate treatment and rehabilitation under civil law instead of punishment under the criminal law.
- Strongly urged the Secretary, Department of Health, Education, and Welfare, to assign to the Intramural Program of NIAAA a minimum of 16,000 square feet of space and eight clinical beds at the NIH campus.
- Endorsed the Institute's request for increased funding for research and increased positions for the intramural program and requested that the Administrator, ADAMHA, review options available to him to provide clinical and laboratory space for the alcohol research program on the NIH campus.

- Passed a resolution to continue efforts toward developing and pursuing those aspects of the National Center for Alcohol Education programs which are positive and important and to discontinue activities that have not proven beneficial to the alcoholism field.
- Endorsed a motion that travel ceiling be raised to \$350,000 without increasing the total Institute budget for 1975.
- Approved the Trans Alaskan Oil Pipeline grant application that has two major components: (1) a community alcoholism program for communities affected by population impact, and (2) an occupational alcoholism program for construction workers on the pipeline. The grant was approved with a number of conditions, including continued involvement by the Governor's Advisory Board on Alcoholism and the State Alcoholism Authority, and assurances from the Anchorage Community College that training will be provided to program personnel.

The Council has offered, and continues to offer, innovative suggestions for the establishment and development of program direction within the NIAAA, particularly in the areas of research and prevention.

OFFICE OF PROGRAM DEVELOPMENT AND ANALYSIS

The Office of Program Development and Analysis analyzed and evaluated progress of programs; assisted the Director, Divisions, and other key staff in establishing priorities; provided advice on program policy and development; coordinated long-range program planning and policy development issues, such as national health insurance; administered NIAAA international activities; compiled statistical information; and integrated data from research programs, program analyses, program evaluation, biometric surveys, and other sources for the preparation of major scientific reports.

The Office consists of two branches -- Program Development and Planning Branch and Program Analysis and Evaluation Branch.

Program Development and Planning Branch

During FY 1975, this Branch was engaged in the following activities pertaining to health insurance coverage:

Third-party Reimbursement Activities to Increase Health Insurance Coverage for Alcoholism Treatment

Though progress has generally been made over the past year in recognizing alcoholism as a very critical health problem, insurance coverage for this illness has been very slow in developing. Thus far, third-party payments usually exclude or highly limit coverage for the treatment of alcoholism, putting great financial stress on alcoholic persons receiving treatment and inhibiting others who might seek treatment if coverage was assured. Even those health insurance policies which do cover alcoholism limit it to a general hospital, thus excluding many types of more economical and effective treatment programs. In NIAAA-supported programs, the average patient has a 14-year drinking history, which adequate insurance coverage could have reduced. Further, the prognosis for complete recovery at this late stage is quite poor, and treatment costs are very high. NIAAA-supported programs currently receive about 9 percent of their income from all third-party reimbursement services, while only 2.5 percent of this is from private insurance.

This Branch has been working with a broad representation from the alcoholism field in an effort to meet some of the inadequacies in the third-party payments area.

Development of Standards for Alcoholism Treatment Services

Of all NIAAA activities, the accreditation of alcoholism programs may well be the most significant, since the insurance industry recognizes and accepts programs accredited by the Joint Commission on Accreditation of Hospitals (JCAH). The accreditation requires that these programs meet certain quality standards pertaining to staff, facilities and treatment procedures. Standards have been developed during FY 1975 by JCAH under a contract with NIAAA, and a Standards manual has been published with a procedure for ongoing surveys leading to accreditation. Implementation of these JCAH standards is beginning to assure insurance carriers, for the first time, of a quality alcoholism program; JCAH had accredited approximately 100 programs by the end of FY 1975, the first year of the Standards effort. In FY 1975, \$147,315 was expended for this effort for the final phase of a contract, in the amount of \$371,355, which was started during FY 1974.

Counselor Certification

Running parallel to NIAAA accreditation efforts were activities aimed at certification of alcoholism counselors. This was a very complex issue with a wide range of degreed and nondegreed people working in the field and few guidelines available for credentialing such various paraprofessional specialties in the health care system.

This Branch let a contract in FY 1974 in the amount of \$121,556 to prepare model standards as a basis for certification, and over 2,000 institutions and associations reviewed the draft standards before the final report was completed. During FY 1975, this model was offered to the States to help them shape Standards commensurate with their needs, though NIAAA supports uniformity in State certification criteria where practical.

The model standards suggested the following basic requirements:

- a. The counselor must have no history or evidence of alcohol or drug misuse for a minimum of 2 years.
- b. The counselor must complete a training program conducted by a certifying authority.
- c. The counselor must have 1 year of alcoholism counseling experience acceptable to the certifying authority.
- d. The counselor must pass an examination verifying that he possesses adequate knowledge and skills in alcoholism counseling.

Incentive Contracts

Five incentive contracts were awarded to profit-making outpatient facilities for the establishment of alcoholism treatment centers with the expectation that these demonstration projects would prove that such contracts can yield high quality treatment facilities which would qualify for third-party payments and become self-sustaining in a short time. Four were awarded in FY 1975 totaling \$2,299,609; and one in FY 1974, in the amount of \$298,459 was still active in FY 1975. These treatment centers focused primarily on occupational programs, entering into agreements with business and industry to provide therapy for employees referred by the employer. The incentive contract initiative is a relatively new concept that was planned to have a 24-month developmental stage. Its full potential is, therefore, yet to be realized.

Health Maintenance Organizations (HMOs)

A grant was awarded to the HMO national association, the Group Health Association of America (GHAA), to set up demonstration projects of broader alcoholism treatment in HMO settings. The objective was to demonstrate that services for alcoholism and related health problems can be accepted as a routine part of the care provided by an HMO. During FY 1975, several pilot projects, supported by the NIAAA grant, were in operation, and GHAA has developed a research design for these demonstration projects. This was a 2-year grant award funded late in FY 1974 in the amount of \$968,352. It is anticipated that the third year of support will be awarded late in FY 1976.

Model Benefits Package

NIAAA determined that a set of model health insurance benefits was needed to help carriers determine reasonable coverage, and during FY 1974 a model benefit package was developed to serve as a guide for alcoholism coverage in health insurance plans. This package eventually will be made available to all State Alcoholism Authorities, employees, unions, the insurance industry and to service providers.

In developing this model, a study was conducted to provide information concerning the costs of different types of alcoholism treatment programs compared to the benefit package, and a preliminary conclusion was that it was reasonable and economical to provide care for alcoholism through the vehicle of a model benefit package. The model benefit package appeared to be adequate for covering the treatment needs of most alcoholic persons. However, this package needs additional study and thorough testing before any large scale implementation can be attempted.

During FY 1975, this testing has been performed by health maintenance organizations in demonstration projects and is still continuing. This contract was to establish the model benefits package which was started in FY 1974; however, the testing of this model benefits package was performed in FY 1975.

Program Analysis and Evaluation Branch

The policy of the Institute is to evaluate all major programs and to begin evaluation at program inception to ensure that the results may be available for program decision-making and to provide guidance for planning.

Evaluation was conducted in each functional area of responsibility of the Institute. Those functional areas include prevention, training, treatment and rehabilitation, research, and public education relating to alcohol abuse and alcoholism.

Findings from NIAAA evaluation activities have provided needed information on treatment program performance, client outcome, staff utilization, treatment benefits, and costs. Also, a system to gain information on the impact of the State formula grant program was developed and a nationwide profile of alcoholism programs, staffing patterns, expenditures, and funding sources should be available through that source in FY 1976. Other evaluations included the effectiveness of the NIAAA Public Education Campaign, a study of multidrug use, and a survey of youth services.

Evaluative information was provided to Congress, Office of Management and Budget, State Alcoholism Authorities, and other Government agencies during FY 1975.

Evaluation findings were widely disseminated through prepared reports, professional periodicals, and presentation to professional groups.

Alcoholism Treatment Program Monitoring System

A system was designed, and implementation started in 1972, to monitor alcoholism treatment projects funded by the Institute. That system was expanded in FY 1975 to include projects within all programs. A total of 117 projects were monitored with the remaining NIAAA-funded projects planned for inclusion within the monitoring system in FY 1976 and FY 1977.

Information provided by the monitoring system showed positive changes as a result of treatment in each program area. Consumption of alcohol, behavioral impairment, and work situation showed significant improvement at 6 months after the admission for treatment. Average alcohol consumption and behavioral

impairment related to alcohol declines over 70 percent in most programs monitored.

As a result of information gained through the monitoring system, it became evident that significant changes have occurred in NIAAA-funded projects.

Greater emphasis has been placed on outpatient care, which has resulted in a 73 percent increase in number of clients served in that treatment setting and has contributed to a 38 percent reduction in treatment costs over the past 3 years.

The monitoring system indicated that another benefit from treatments was a reduction in the number of persons institutionalized after admission to treatment for alcoholism. As shown in the following tabulation, 73 percent fewer persons were institutionalized between the fifth and sixth months after treatment began than during the month prior to treatment. A portion of the institutionalization was represented by hospitalization which decreased by 68 percent in the Alcoholism Treatment Centers (ATCs).

The added earned income of clients was indicative of some of the economic benefits of treatment. The employment increase of 16 percent, combined with an increase in monthly wage, provided over \$1,052,000 during a single month measured for the group of clients in one program area.

Benefits of early intervention in the alcohol abuse pattern also were demonstrated in FY 1975. Those clients reported as drinking frequently, or heavily, for less than 5 years required fewer resources and were more improved after treatment than other clients. Persons drinking heavily for less than 5 years required an average of 13.7 days in treatment, while clients reporting heavy drinking for a longer period of time averaged up to 21.5 days. In outpatient care, those drinking heavily for less than 5 years averaged 19 hours of treatment as compared to 25 hours for the group drinking heavily or frequently for more than 5 years.

Other Client Benefits from Treatment*
(Alcoholism Treatment Centers)

Reduction in clients institutionalized	(3,549)	73%
Reduction in clients hospitalized	(1,702)	68%
Increase in employment	(1,581)	16%
Increase in average monthly wage	(\$38)	9%
Estimated additional total client income per month	\$1,052,000	

*Above figures represent the immediate 30 day period beginning 6 months after the onset of treatment compared to the 30 day period prior to treatment.

During FY 1975, \$496,320 was awarded for this effort in addition to \$547,279 which was awarded late in FY 1974. This total amount of \$1,043,599 will carry this continuing program through January 1976.

Client Followup Study

A followup study of Alcoholism Treatment Center (ATC) clients was undertaken for the primary purpose of examining the effects of ATC treatment and gaining insight into aspects of treatment center operation with particular regard to the retention and followup of clients. A sample of 1,340 individuals from eight ATCs were surveyed 18 months after their initial contact with the centers. Some of the significant findings from initial analyses were:

- Alcoholism is treatable -- about 70 percent of ATC clients showed sufficient improvement to be defined as "in remission" at 18 months after intake. The value of early intervention, exemplified by DWI (Drinking While Intoxicated) clients, was demonstrated by markedly less severe problems at admission and greater degree of recovery.
- Even those clients having minimal contact with the centers showed a substantial remission rate. However, remission was about 20 percent higher for clients receiving relatively high amounts of treatment.
- Different types of treatment had relatively uniform effects on client remission. The most important predictors of client outcome were client characteristics, such as socioeconomic status and severity of problem at intake, rather than the particular treatment types or settings utilized.
- Group remission rates at 6 months after admission are very close to those measured at 18 months after admission to treatment.
- Treated clients showed increased participation in the labor force and added income through an increase in employment -- of former unemployed alcoholic persons as much as 50 percent for male, non-DWI clients.

These followup data have been added to an existing base derived from a routine monitoring system implemented in NIAAA-supported treatment programs. A number of additional analyses are scheduled. Furthermore, another study of this client group is planned at 3 years after admission to ascertain long-term effects of treatment. This contract effort, that was started in FY 1974 and continued through FY 1975, amounted to \$449,732, of which \$56,981 was awarded in FY 1975.

Public Education Campaign Evaluation

A nationwide survey was performed during FY 1975 to determine the extent of public awareness of the NIAAA Public Education Campaign. The survey also sought to determine the attitudes and behavior of the general population regarding the consumption of alcohol.

The study findings revealed a high rate of recall of the messages of the education campaign. The high rate of recall (62 percent) suggests that the campaign is reaching the public, especially those persons under 45 years of age, with high school educations, and earning over \$5,000 annually.

Over 90 percent of those polled view alcohol abuse and alcoholism as serious problems in this country today, while 81 percent view marihuana use as a serious problem.

Twenty-one percent of current regular drinkers began to drink on a regular basis by the age of 18. The median age for the first drink for the general population was shown as 16.6 years, for men 15.4 years. Therefore, the importance of focusing prevention and educational campaigns on that age group becomes apparent.

The cost of this survey was \$161,130, and the contract was awarded late in FY 1974.

Evaluation of State Aftercare Efforts

A joint study with the Texas State Commission on Alcoholism and the Texas Department of Mental Health and Mental Retardation was undertaken on the effectiveness of State aftercare. The study included interviews with 900 alcoholism clients discharged from Texas State hospitals in 1971 and a comparison of them with interviews of 900 alcoholism clients discharged in 1974. The later group was interviewed both at admission and discharge.

The findings of the study were supportive of the NIAAA client followup study regarding the effects of treatments. Approximately 60 percent of the clients were significantly improved 1 year after discharge. The aftercare system is shown to provide needed services to persons suffering from alcoholism.

This study cost amounted to \$147,586. The award was made in FY 1974 and extended through FY 1975.

Evaluation Assistance to States

A 3-year grant was awarded in FY 1974 to the Council of State and Territorial Alcoholism Authorities to assist States desiring to develop and implement monitoring systems for alcoholism treatment programs. The Institute was interested in having all States

develop the capability to monitor and evaluate their alcoholism programs in order to improve those services and to serve all those needing help.

This project's goal is to provide the necessary resources to develop compatible data systems for all States that request it. Compatibility of data will allow the development of nationwide utilization rates and should provide studies that will be of mutual usefulness to all States and to the Institute.

This grant was awarded in FY 1974 for \$2,000,000 to be continued through FY 1976. This effort is in the process of implementation.

Formula Grant Monitoring System

A project to develop a system to measure the impact of the State Formula Grants was initiated during FY 1975. This system was designed to collect data on the staffing, funding, and usage of training, treatment, prevention, research, and activities related to the States alcoholism effort. Late in FY 1974, \$88,000 was awarded. During FY 1975, the contractor developed and pretested this system in five States, and the forms were submitted to the Office of Management and Budget (OMB) for clearance. The States are to report annually. It is planned that the data will be processed by the Institute and output reports will be provided to all system users.

PROGRAM COORDINATION

During FY 1975, the Associate Director for Program Coordination concentrated on the development and implementation of these objectives:

- To effect optimum coordination, liaison, and evaluation of all NIAAA programs (including grants and contracts) as a total, integrated system.
- To provide timely management information for decisionmaking to the Director and all Divisions, Branches, key staff, and Regional Offices, in order to provide for optimum interaction and interfacing.
- To serve as the focal point of all interagency agreements.
- To improve efficiency and effectiveness, by improved utilization of all NIAAA resources.

Detailed plans were developed to accomplish each of these objectives.

Management Information System

Numerous programs involving interaction across several Divisions of the Institute were coordinated, and the need for programmatic functional integration became apparent at all levels of management. A Management Information System for decisionmaking and control was designed to serve the needs of the Director of the Institute and top management. When fully operational, it will provide for (1) overall as well as detailed functional information on all existing and proposed programs (including applications, grants, and contracts), (2) the interfacing and interacting of all NIAAA programs and resources prior to and after award, and (3) feedback information on efforts and expenditures for decisionmaking and control. This system will present the workload of the functional programs such as treatment programs and subfunctional programs such as public inebriates, drinking drivers, manpower and financial resources committed, progress, actual expenditures, and actual end performance results (patients served, students educated in prevention concepts, etc.).

This system will provide for the Director a total picture of all Institute program activities. The following will be provided:

-- An Overall Management Information and Control System

The Overall Management Information and Control System will provide the Director and key staff with a total programmatic and functional picture of the entire Institute for use in decisionmaking and control. This includes a brief description of the functional programs in each Division, its workload of applications, grants and contracts, in-house studies, manpower, and fund allocations. It will be a coordinated and condensed overview of the supporting Detailed Management Information and Feedback Control Systems.

-- A Detailed Management Information and Control System by Functional Programs

The Detailed Management Information System will provide information on every functional program in each Division, Office, or by other staff. The status of the workload, progress, and number of staff assigned to each program will be available; and the effectiveness can be evaluated by the results achieved.

-- A Feedback Control System

Feedback control information will be provided to the Director and key staff for decisionmaking on: (1) the functional scope of applications received in each Division/Office to avoid overconcentration of efforts and expenditures in any one program area and region prior to award of grants or contracts to assure a balanced effort and workload; (2) the functional programmatic know-how of types of grants and contracts being awarded in any area to provide for improved interfacing and interaction between programs; (3) manpower allocation by functional programs; and (4) effectiveness of each type of program in the communities for consideration of changing priorities, for additional support of these types of programs or phase-out, whichever is appropriate.

Annual Report

The Annual Report for Congress for each fiscal year is prepared by Program Coordination in accordance with the requirements of Title I of P.L. 91-616, section 102, as amended by section 203 of P.L. 93-282. This narrative report covering FY 1975 reflects the

fourth full year of operation of the NIAAA. It contains a description of the actions taken, services provided, and funds expended under P.L. 91-616 and Part C of the Community Mental Health Centers Act, and an evaluation of the effectiveness of such actions, services, and expenditures of funds. NIAAA will, in the future, also report (as specified in section 102(5) of P.L. 91-616 as added by section 203(b)(2)(A) of P.L. 93-282) on the extent to which other Federal programs and departments are concerned and dealing effectively with the problems of alcohol abuse and alcoholism. These actions can only be reported after full implementation of the Interagency Committee on Federal Activities for Alcohol Abuse and Alcoholism authorized by 42 USC 4553, section 103 of P.L. 91-616, as added by section 131 of P.L. 93-282.

National Environmental Policy Act (NEPA) P.L. 91-190
Implementation

The National Environmental Policy Act (NEPA) of 1969, P.L. 91-190, 42 USC 4332, Executive Order 11514, and Guidelines of the Council on Environmental Quality (CEQ) require the assessment of the environmental impact of all actions by Federal and Federally supported programs and projects before a decision is made to take any action and before the commitment of resources. In addition, a reassessment of ongoing programs is made.

Implementation Actions

(a) Generic Analysis

The implementation of the HEW Compliance Procedures, contained in chapters 30-10 to 30-16 of October 1973, is in process. The Office of Program Coordination has performed a generic analysis of each type of the NIAAA programs and projects to identify those programs and classes of actions that can be screened out (exempted) as they do not have a significant impact on the environment, and subsequently these programs are not subject to the NEPA requirements of assessing each application, grant, contract, and ongoing programs. If the generic analysis is accepted by the Office of Environmental Affairs, HEW, a Statement of Inapplicability (SI) can then be provided and these programs will have to be reviewed only if they fall under the exception of the SI. As of December 31, 1975, NIAAA has not been exempted and, as a result of more detailed information provided to the reviewing panel and a better understanding of the programs of the Institute, a new review of the generic analysis is now in process by the principal environmental compliance officer for HEW,

Office of Environmental Affairs (Office of the Secretary for Administration and Management), in conjunction with EPA and CEQ.

(b) Narrative Information Guidelines for Applicants and Grantees

Narrative information questions have been prepared in accordance with HEW procedures for the applicants' environmental analysis for each of the applicants. Based on their analysis, NIAAA will perform the environmental assessments for all actions to determine for each individual case whether a Determination of Inapplicability (DI) can be furnished or if a Marginal Impact Statement (MIS) or a Full Environmental Impact Statement (EIS) has to be prepared, which includes requirements that necessary safeguards have to be taken by applicants and/or grantees to assure compliance with the Act. Should exemption be granted for any classes of programs, assessments will have to be made only for the nonexempted classes of actions.

Privacy Act (P.L. 93-579) Implementation

The Privacy Act became effective September 27, 1975. This Act required that: (1) personal information about individuals which is collected and retrieved by individual name or identifier by Federal agencies be limited to that which is legally authorized and necessary; (2) such information be maintained in a manner which precludes unwarranted intrusions upon individual privacy; and (3) a subject individual be given notice and access to records about him/her in existence, the opportunity to review such records, to challenge the contents and to request amendments.

To carry out the implementation of this Act, all record systems pertaining to grants, existing contracts and studies had to be reviewed during FY 1975 as well as new requests for proposals of contracts. A description of the systems of records containing information on individuals that is retrieved by personal identifiers, had to be prepared and published in the Federal Register. This included a statement of the purpose of the system, and the type of information collected, as well as the routine disclosures to be made to persons outside the agencies.

To carry out the intent of the Act, a Privacy Act officer for the Institute was appointed in the Office of Program Coordination, to institute safeguards, to monitor, and to coordinate with all points of clearance to assure the privacy of individuals. She is assisted by record systems managers for grants and contracts.

All contracts in effect prior to the effective date of this Act were reviewed and those involving systems of records containing personally identifiable data, retrieved by names or personal identifiers, have been amended to cause the requirements of the Privacy Act to be applied to such records. Compliance involved Departments, OMB, Congressional clearances and the publication in the Federal Register of notices of systems created and maintained pursuant to the contract. The contractors were also informed of the criminal penalties involved for unwillful disclosures.

Similarly new contracts underwent the same stringent analysis and evaluation and where this Act was found to be applicable, system notices were prepared, departmental clearances were obtained and advance notice was given to Congress and the Office of Management and Budget in order to permit evaluation of the probable or potential effect of such proposal on the privacy and other personal rights of individuals or the disclosure of information prior to awarding of such contracts.

Any changes in the uses of these systems of records which affect individuals have been reviewed and are in process of being published in the Federal Register.

The Institute systems managers and the Privacy Act officer have prepared monthly reports detailing the inquiries and the access requests received, the amendments made, the employee training activities undertaken, and the problems and issues arising from the implementation of the Act. This accounting is made for the preparation of the President's annual report to the Speaker of the House, and to the President of the Senate as required by the statute.

Rural Health Programs

A. Rural Health Initiative Program (RHI)

The objectives of the Rural Health demonstration initiative are to design, implement, and evaluate integrated health care delivery systems to solve the problems of inadequate and inaccessible health services provided in rural areas. The emphasis is on integrated multiprogram efforts directed at entire populations in county and multicounty areas. In order for these systems to become professionally and economically viable, the mandate of this effort is to provide comprehensive primary care locally; and appropriate linkages will have to be developed to other levels of care including alcoholism treatment services through the interfacing of NIAAA's grantees.

The program is spearheaded by the Office of the Assistant Secretary for Health, and a PHS Rural Health Coordinating Committee (RHCC), chaired by the Health Services Administration (HSA)--Bureau of Community Health Services.

The Office of Program Coordination has been designated to coordinate this effort between the Institute, ADAMHA, the PHS Committee, the Regional Offices and other agencies, and is participating in this effort with the PHS and ADAMHA working committees.

Several models for RHI sites have been proposed by the RHCC, and NIAAA has also proposed a model which is tailored for alcoholic patients as an integral part of the Rural Health care delivery system. Basically, although the models are flexible, the criteria will be the optimum utilization and integration of all required resources.

A list of NIAAA grantees located in each of the 10 regions has been provided by NIAAA to the RHCC central office and the regions that wish to provide treatment for alcoholic persons in a team effort with primary care RHI grantees. The final selection and funding will be provided by the RHCC central office with recommendations from the regions and NIAAA. NIAAA in conjunction with the Regional Offices will coordinate these linkages. A RHI grant will range from \$50,000 to a maximum of \$200,000.

Emphasis is on NIAAA's developing 10 formal relationships (during FY 1976) with model rural referral centers and consultation networks established between rural primary care projects and the alcoholism programs serving those areas. The plan is eventually to tie in alcoholism programs with the 47 RHI programs awarded in FY 1975 and the planned additional 70 RHI programs in FY 1976.

B. Rural Health Initiative Program for Underserved Rural Areas (HURA)

An additional Rural Health Program called Health Underserved Rural Area Program (HURA) is being coordinated by the Office of Program Coordination. The Health Underserved Rural Area (HURA) program has been established in FY 1975 to support demonstration and research on innovative methods of delivery and financing of health care services in underserved rural areas. This program is spearheaded by the Social and Rehabilitation Service, Medical Services Administration (SRS/MSA). Although this program is also linked to the RHI program described in subsection A above, it will be funded by SRS/MSA. The program is authorized under section 1110 of the Social Security Act and funded with Title XIX Medicaid funds.

The HURA program is interested in those existing health care providers or organizations which have demonstrated financial viability. HURA will support those organizations with limited funds for expansion.

A HURA grant will not exceed \$230,000 (this includes \$30,000 for research) for the first year and should show decrease in a 3-year period. (HURA will provide this funding to any of our grantees.) At the end of a 3-year period, the grantee should no longer require HURA monies and move toward self-sufficiency.

The initial phases of the program have been started at the end of FY 1975, and the application review and selections will be made in FY 1976. The Office of Program Coordination will interact and interface with the operating Division, SRS/MSA, and the Central Rural Health Coordinating Committee.

Collaboration and Interaction with Other Agencies

The adequacy and technical soundness of joint or interfacing programs which relate to alcoholism and alcohol abuse were evaluated. Exchange of information and participation were provided to maintain the coordination and effectiveness of such programs and activities. Interagency efforts dealing with alcohol abuse and alcoholism were coordinated with related health, rehabilitation, highway safety, law enforcement, welfare programs, and other Government agencies. These formal and informal inter-agency agreements provided for the collaborative utilization of each agency's resources.

Interagency activities in FY 1975 included:

-- Department of Transportation (DOT) Public Education Campaign

A national public service program was coordinated and implemented by NIAAA with the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) to increase public awareness of the facts about alcohol use and abuse, to develop responsible attitudes toward the drinking of alcoholic beverages, and to reduce the incidence of drunk driving. During FY 1975, this agreement was monitored in conjunction with NHTSA. The agreement and funding took place in FY 1974. DOT reimbursed NIAAA in FY 1974 \$642,209 of a total of \$1,391,287 expended by NIAAA for the Public Service Education Campaign.

-- Department of Transportation Alcohol Safety Action Programs (ASAP)

The joint effort, by NIAAA and the National Highway Traffic Safety Administration of the Department of Transportation, to reduce traffic accidents caused by drinking drivers, continued through FY 1975. The drinking driver program was conducted as a collaborative relationship with the Department of Transportation in five selected geographical alcoholism program safety areas. NIAAA provided technical support and consultation in setting up ASAP's service programs and referring drinking drivers to NIAAA treatment facilities. The interagency effort reduced the number of drinking drivers on the road through the treatment process.

-- Department of Justice--Joint Planning for Criminal Justice Population

NIAAA staff was represented on an advisory board of the Department of Justice to oversee the planning of two items: (1) the development of model treatment programs for the criminal justice population, and (2) the planning for a joint symposium to bring together the State Planning Agencies and the State Drug Authorities to discuss strategies for the delivery of drug abuse treatment to the criminal justice population, with input on alcohol abuse and alcoholism where applicable. The symposium will take place in FY 1976. The cost of the symposium will be borne by the National Institute on Drug Abuse, and advice and technical assistance will be provided by NIAAA.

-- Department of Justice--Development of Guidelines for the Drug Abuse and Alcoholism Programs for the Criminal Justice Population

In March of 1975, the Law Enforcement Assistance Administration (LEAA) issued guidelines to the State Planning Agencies for drug abuse and alcoholism treatment programs for the criminal justice population. During FY 1974 and FY 1975, NIAAA as a member of a task force provided coordination and consultation on the development of LEAA guidelines for State Planning Agencies on the establishment of alcohol abuse treatment programs for the criminal justice population. Provisions for alcoholism treatment programs are a requirement for State agencies applying for grants under section 453 of P.L. 93-83, 42 USC 3750b.

-- Department of Justice--Law Enforcement Assistance
Administration (LEAA) Development of Program Materials

NIAAA has collaborated with LEAA in stimulating the development of program materials to aid both alcoholism and criminal justice administrators in program development for this population.

-- Legislative Professional Staff Project on Drug Abuse and Alcoholism by the Citizens Conference on State Legislatures (CCSL) Supported by the National Institute on Drug Abuse (NIDA), National Institute on Alcohol Abuse and Alcoholism (NIAAA), and National Highway Safety Administration (NHTSA) of the Department of Transportation (DOT)

In FY 1975, the multiyear interagency agreement (awarded in FY 1974) was implemented and coordinated among the National Institute on Drug Abuse, NIAAA, and the National Highway Traffic Safety Administration, for the Citizens Conference on State Legislatures. The major objectives of the program are: (1) to stimulate State legislative action in developing sound policies in regard to drug abuse and alcoholism; (2) to demonstrate that the efficiency and effectiveness of the legislative process are substantially improved if major standing committees operate on a year-round basis with the support of full-time, professionally qualified staff; and (3) to build communication linkages among State legislatures, Federal agencies, and the educational and scientific communities. This program is designed to demonstrate the value of support by professionally qualified staff and to evaluate the impact of such staff on State legislative action relating to alcoholism and drug abuse. CCSL teams of well-trained and experienced staff were placed in selected demonstration States to assist appropriate committees over a 2-year legislative cycle. The knowledge gained will be disseminated to key legislators of nondemonstration States through seminars and conferences. The total program effort (to extend through FY 1978) will amount to \$2,313,353, of which NIDA will reimburse NIAAA \$675,000. During FY 1974, NIDA reimbursed NIAAA \$390,000 for its efforts for FY 1974-1976; and NHTSA of DOT reimbursed NIAAA \$100,000 in FY 1974 for participation in the grant award to the Citizens Conference on State Legislatures for State Legislative Action on Alcoholism and Drug Abuse. In FY 1974, NIAAA and NIDA awarded the CCSL a grant amounting to \$982,050 for direct costs for FY 1974 through FY 1976. During FY 1975, 10 professionals were employed and trained to implement the actions described in (1) through (3) above in five demonstration States: Pennsylvania, Oklahoma, Oregon, Wisconsin,

and Virginia. The results of the project in the five demonstration States will be shared through seminars with legislative bodies in the surrounding States early in FY 1976. Monitorship of this grant was performed by the Division of Resource Development, State Assistance Branch.

-- Department of Defense--Alcohol Programs Activity

Programs, formal and informal agreements, were coordinated with the Department of Navy, Department of the Army, and Department of the Air Force. NIAAA provided technical assistance and consultation in the creation, implementation, and evaluation of their programs, and prepared materials for specific target groups.

-- Department of the Navy

A presentation was prepared for the Navy Alcohol Safety Action Program to support their Alcoholism Prevention Program. NIAAA will be reimbursed \$6,400 for this effort. A brochure was prepared by NIAAA explaining the chaplain's role in the Navy Alcoholism Prevention Program. NIAAA will be reimbursed \$8,975 for this effort.

An evaluation of the Department of the Navy's treatment program for alcoholism was conducted at treatment centers (dry docks) by NIAAA staff (Division of Prevention). The findings were submitted to the Department of the Navy.

-- National Bureau of Standards--Development of Standards for Occupational Alcohol Abuse Programs

Consultation was provided to the National Bureau of Standards in the development of policies and procedures for alcohol abuse programs designed to serve Bureau personnel in the metropolitan Washington, D.C. area.

-- Department of State

Consultation was provided to assist the Department of State in establishing a program for the prevention and treatment of alcoholism for State Department personnel stationed in foreign countries.

-- Civil Service Commission

Consultation is currently being provided to the Civil Service Commission to set up occupational programs in 10 Civil Service regions.

-- National Institute on Drug Abuse (NIDA)

A joint program monitoring service between NIDA and NIAAA is planned to be carried out at 10 sites which are demonstrating the provision of combined treatment services for alcohol and drug abusers. The system has been designed, treatment center personnel have been indoctrinated, and data collection will start in FY 1976.

-- Administration on Aging, Office of the Assistant Secretary for Human Development, Office of the Secretary

Preliminary negotiations have been started with staff of the Administration on Aging (AOA) to explore mutual interests in joint program development for the aged person experiencing problems with alcohol.

-- Indian Health Service

Collaborative efforts between NIAAA and the Indian Health Service, exploring avenues of joint programing and exchanging ideas on the development of alcoholism services for American Indian people, were carried out.

-- Health Services Administration (HSA)

A liaison and consultant relationship has been maintained through FY 1975 with the Division of Emergency Medical Care Services, HSA, for the purpose of sharing information and program materials that will assist both the alcoholism field and the general emergency medical care programs in developing emergency care services for alcoholic persons.

-- Social Security Administration (SSA) - Information Exchange Pertaining to NIAAA Grantees Involved in Alcoholism Treatment

The Social Security Administration and NIAAA exchanged data in FY 1975 relating to the implementation of Title XVI of the Social Security Act, as amended by P.L. 92-603 (Section 1611(e)(3) of the new Supplemental Security Income program), which requires that an alcoholic person be undergoing active treatment to be eligible for such assistance.

Evaluation of treatment efforts relating to implementation of Title XVI was begun and has continued through FY 1975. (Technical support was provided by an Institute physician and other professional staff.)

-- Department of Transportation, Federal Railroad Administration

During FY 1975, NIAAA served on the task force of the Federal Railroad Administration to assess the need for alcoholism policies and/or regulations covering railroad personnel.

-- U.S. Office of Education (OE)

A reimbursable agreement was negotiated between NIAAA and OE for the latter to produce for the Youth Education Branch of the Division of Prevention a series of films for youth, particularly for 9th to 12th grade students, to assist them in making conscious decisions regarding alcohol and for teacher orientation of the films to be shown to the students.

DIVISION OF SPECIAL TREATMENT AND REHABILITATION PROGRAMS

Office of the Director

The Division of Special Treatment and Rehabilitation Programs developed and supported programs designed to reduce and prevent alcohol-related problems, with emphasis on the needs of special population groups. Programs provide treatment and consultation services for alcoholic employees of Federal, State and local Government and industry, Cross-Populations, low-income persons, American Indians, Alaskan Natives, Blacks, Spanish-Americans, the criminal justice population, women, youth, migrant farm laborers, chronic drunkenness offenders, drinking drivers, aged people, and to persons supported by noncategorical programs. In some cases, funds are provided for staff only.

The Division launched, under contract, a National Technical Assistance and Evaluation Program that provided an onsite review of approximately 440 NIAAA-funded service programs. The Program was established with the objectives of identifying the strengths and weaknesses of the individual projects, assessing their progress toward self-support, and providing the Institute with an up-to-date evaluation to be utilized in considering continuation funding requests. In addition, the contract has provided limited program and management technical assistance to projects in areas requiring further strengthening.

As part of the Institute's effort in health insurance, this Division has been working with both private, for-profit, and non-profit health carriers to assist them in developing broad-based benefit packages for alcoholic persons. These health insurance initiatives by the Division are seen as important program efforts in removing financial deterrents to care and providing an essential base for third-party reimbursements that will stimulate the continued growth of local service providers.

The Division has been concerned about the need for upgrading the community organization skills of staff working in local service programs. During FY 1975, two reports were completed under contract that (1) assessed the status of community planning in the alcoholism field, and (2) developed a technical assistance guide to assist community organizers in the field to enhance their skills. The reports were circulated for additional broad input prior to their publication and public dissemination. It is intended that these materials will strengthen the alcoholism field's resources in community organization theory and practice in what has been a sparse literature area, and will be utilized in a variety of educational and training forums.

The Division comprises an Occupational Alcoholism Branch and a Special Projects Branch. A total of \$70,860,000 was awarded in FY 1975 for grants and contracts (see table 2, p.4). These awards consisted of 495 grants in the amount of \$69,030,000 and seven contracts in the amount of \$1,830,000 -- three contracts were awarded from Community Program funds in the amount of \$1,449,000 (see footnote, table 2, p.4) and the balance from Management and Information Project contract funds (table 1, p.3) for programs described below. In addition to the 495 grants awarded in FY 1975, the Division had 326 active grants amounting to approximately \$26.3 million funded in FY 1974.

Occupational Alcoholism Branch

Programs are designed to provide early identification of alcoholism based on impaired job performance and to provide assistance to problem drinking persons within employed populations. The programs possess considerable potential for reaching increasing numbers of Americans affected by alcoholism.

State-based Occupational Program Consultants

In 1972, the Occupational Programs Branch launched a nationwide occupational consultation effort, through grants made available to all States and territories, for the employment of two occupational alcoholism program consultants for each State. Occupational program consultants provide orientation and technical assistance in the development of programs. The form and the financing of programs at the level of the local work organization are the responsibility of those organizations, together with the labor organization that may represent the respective work force. In all but two instances (Idaho and Wyoming), these grants would normally have expired in FY 1975. Those with unexpended funds remaining were authorized to use these funds for hiring consultants during the current fiscal year. Thirty-six States continued this activity with their own funds after these grants expired in June 1975. Ten of these States have expanded the effort beyond that contemplated in the original grants.

A survey, conducted during FY 1975, revealed that this program had resulted in the start of 922 programs in industry and the public sector, serving a total work force of over 3,000,000 employees. The cost of starting and maintaining these programs is borne by the employer.

Occupational Alcoholism Demonstration Projects

The Occupational Programs Branch also supports a range of demonstration projects focused upon particular strategic models and problem areas in occupational alcoholism.

During FY 1975, a demonstration project based in New York City began work developing techniques and management systems designed to develop greater receptivity to occupational programing concepts in major corporations headquartered in New York City.

The first phase consisted of a subcontracted survey of these major corporations to establish the extent of their existing occupational programs, both at the corporate headquarters and nationwide, and to collect both qualitative and quantitative data on the nature and the effectiveness of these efforts. The findings indicate that less than a third of these giant corporations have employee alcoholism programs, and that many of the existing programs need considerable technical assistance to enhance their effectiveness. The next phase will be to use the data to develop the most effective strategies for extension of occupational programing concepts within large corporations and to develop effective occupational alcoholism programs across this range of corporations.

A project based in Denver, Colorado, is exploring program models for effective outreach to problem drinking members of highly professional occupations. This effort is dealing with a segment of the commercial airline pilots, using a range of training and orientation techniques to generate early supervisor and peer-based referrals of developing alcoholics within this population. The grantee union also provides model professional referral and followup services for airline pilots identified within the target population. This program is expected to have considerable application for use in other professional groups. In FY 1975, the Branch undertook initial exploration for similar projects with the legal profession and clergy.

Another demonstration grant was awarded to a large Midwestern university which is developing a model alcoholism and employee assistance program on its six campuses for the entire professional and nonprofessional staff and their family members. To date, successful program development in this type of professional setting has been minimal. The results of this project are expected to have considerable general value for use by other such institutions. Personnel of the Occupational Programs Branch provided consultation to other universities during FY 1975 and participated in a nationwide conference on occupational alcoholism programs in universities organized by and held at the University of Delaware in June 1975.

A large-scale project involving a demonstration grant to the National Council on Alcoholism began during FY 1975. This demonstration project is to be based in 10 cities across the Nation.

The basic model to be employed and tested in the project is the use of peer management and labor influence in the development of occupational programs in these cities. A national labor-management advisory group has been set up as a national steering committee that will develop parallel committees at the local level in the

10 cities. By manning these committees with top influential personnel in both labor and management, the project will be able to explore the usefulness of this influence base and promote the development of joint labor-management programs in work organizations that are based in the respective localities.

Several other projects are involved in exploring the feasibility of using labor organizations as the motivating force for occupational program development. One, based in Missouri and involving the cooperative support of all segments of organized labor in the State, uses teams of experienced union members with consultation training and prior alcoholism experience to develop and implement labor management agreements in organized shops in the many urban areas of Missouri. Responsibility for operating individual programs is vested in a joint labor-management committee at the local plant level.

A nationwide professional association of occupational alcoholism consultants and company program administrators--Association of Labor-Management Administrators and Consultants on Alcoholism--was the recipient of another demonstration grant. This organization has conducted several surveys on the extent of occupational program development nationwide and on the location, background, and qualifications of personnel employed in this field. The Association has also subcontracted with a research organization to conduct a comprehensive study of the costs and benefits of occupational alcoholism programs in a representative set of 16 organizations located throughout the Nation. The subcontractor assembled a panel of experienced program and research personnel in the Fall of 1974 to assist in the design of the project. During FY 1975 the subcontractor also produced a summary paper on progress and development in occupational programing, as well as two extensive annotated bibliographies of the professional and scientific publications in occupational alcoholism. These were distributed to the occupational alcoholism community. This Association now has a dues-paying membership of nearly 1,000 members.

Several demonstration projects are exploring the feasibility of developing mechanisms to generate self-referrals among employed problem drinkers and their dependents. The employees and dependents may receive confidential assistance and other referral information over a 24-hour "hot line" which is manned by professional counselors. One such project, based in Philadelphia, has enjoyed widely publicized success in its use of this mechanism for employees in several departments in that city as well as in private enterprise.

The Branch also contracted for extensive monitoring, evaluation, and research efforts designed to strengthen existing program initiatives, as well as to elicit important developments that could have significant implications for the field of occupational alcoholism.

Another activity has been the design and implementation of the Employee Assistance Program for nearly 45,000 employees of the six agencies making up the Public Health Service within the Department of Health, Education, and Welfare in accordance with 42 USC 4561. A training program was conducted for supervisory and related personnel participating in this program.

During FY 1975, the Occupational Alcoholism Branch funded 25 grants in the amount of \$3,346,000. In addition, this Branch administered 67 active grants amounting to \$5,330,000 from previous year funding.

Special Projects Branch

The Special Projects Branch supported direct project grants in 14 different program categories: Aged, American Indian, Black, Criminal Justice, Cross-Population, Comprehensive Staffing, Drinking Driver, Migrant Workers, Poverty, Public Inebriate, Spanish-American, Women, Youth, and Non-Categorical. Additionally, the Special Projects Branch has grant responsibility with the National Institute on Drug Abuse for several alcohol/drug abuse projects funded in FY 1975. A total of 470 projects received support in the amount of \$65,684,000 during FY 1975.

Staffing and Cross-Population Programs

During FY 1975, 44 staffing grants provided continued support to conduct comprehensive alcoholism treatment and rehabilitation service programs. Programs funded under this mechanism are required to provide a specific range of services including in-patient, outpatient, intermediate, and emergency care, as well as consultation and education services. Funds under this program supported initial salary costs of professional and technical personnel. Although this grant mechanism is no longer utilized by NIAAA, the Institute continued its commitment to the 44 previously funded staffing grants for a total dollar amount of \$10,423,000 in FY 1975.

Cross-Population programs, which are direct project grants, are used by the Institute in lieu of staffing grants to enable communities, which wish to serve more than one target population through a single program, to utilize the various Institute guidelines that pertain to special population groups in a flexible manner as determined by the needs of the alcoholic population. This is in keeping with the Institute's policy of directing the focus of communities to the needs of alcoholic people rather than the needs of institutions or particular service systems. In FY 1975, 155 Cross-Population applications were reviewed, and 22 programs received support amounting to \$5,863,000 (see table 3, p. 36). In addition, 41 Cross-Population grants were administered from previous year funding in the amount of \$8,356,000.

The American Indian Program

Recognizing the special severity of alcoholism problems among American Indians, the Institute continued support of alcoholism programs for this population as one of its top priorities in FY 1975.

The primary FY 1975 objective of the American Indian alcoholism program was to assist in making the best alcoholism treatment and rehabilitation services available at the community level. To accomplish this objective, each program was designed to provide a variety of services, which may include residential care, room and board for problem drinkers seeking help, individual counseling, job placement, referral service, group therapy, Indian Alcoholics Anonymous groups, didactic lectures, work therapy, and recreation and self-government. Broad programs of public education, training of Indian people, and development of community services were also offered.

Since their inception, the Indian alcoholism programs have had a significant impact upon the attitude of Indian people toward drinking--the first vital step in recovery. The communities and Indian tribes living on reservations have gained valuable knowledge about alcohol abuse and are now viewing alcoholism as a major social, cultural, and economic problem. In addition, some alcoholism programs were developed without Federal funds, marshaling community resources in a concerted effort to meet the needs of Indian people afflicted by alcoholism.

The American Indian Commission on Alcohol and Drug Abuse (AICADA) continued to provide technical assistance to isolated American Indian communities on and off reservations.

During FY 1975, 129 Indian applications were reviewed and 148 projects (new and continuations) were funded at a level of \$16,641,000 (see table 2, p. 4). In addition, 23 Indian projects and 119 Alaskan Native programs (mini-grants) amounting to approximately \$2.8 million were administered from previous year awards.

Poverty Alcoholism Program

The community Alcoholism Services Poverty Program is a component of the Special Projects Branch within the Division of Special Treatment and Rehabilitation Programs. The intent of the program is to support special projects that demonstrate how a variety of services can be made available and be effectively utilized by the low-income alcoholic person and his family. It is intended to demonstrate that the needs of the poor can be integrated into existing health and social service systems.

During FY 1975, 172 poverty projects--new and continuations--were supported in the total amount of \$15,326,000 (see table 2, p. 4).

Black Alcoholism Program

Black persons are a minority group experiencing deprivation, and heavy drinking has accentuated or been a response to such hardships as limited access to jobs, poor housing and education, and inadequate medical care. In an effort to respond to the needs of this special population, the Institute in FY 1975 placed priority emphasis on funding support for projects targeted for black populations.

During FY 1975, 32 black applications were reviewed and 14 projects were funded in the amount of \$3,336,000 (see table 3, p. 36).

Spanish-American and Migrant Farmworkers Alcoholism Program

The significant number and size of Spanish-American communities in the United States and Puerto Rico and the unique needs of this bicultural and bilingual population form some of the essential bases for this program.

During FY 1975, 40 Spanish-American applications were reviewed and eight Spanish-American projects were supported in the total amount of \$1,550,000 (see table 3, p. 36).

Migrant and seasonal farmworkers have been one of the most neglected special population groups. Because of such handicaps as inadequate housing, unemployment and underemployment, poor educational background, inadequate health care, discrimination, and transiency, they have a high alcoholism potential.

During FY 1975, eight applications were reviewed and three migrant farmworker projects received support totaling \$309,000 (see table 3, p. 36). Another grant in the amount of \$235,000 was active in FY 1975 from a previous award.

Women's Alcoholism Program

The Institute initiated and supported projects designed to meet the special treatment and prevention needs of women who suffer from alcohol abuse and alcoholism. Services in these programs were tailored to the full range of problems specifically encountered by women, whether married or single, employed or unemployed, and at any stage of physical and psychological debilitation.

During FY 1975, 33 women's applications were reviewed and 13 women's projects, eight of which are new, were supported at a level of \$1,874,000 (see table 3, p. 36). Another grant was active in FY 1975 in the amount of \$165,000 from a previous award.

Youth Program

Surveys reveal that the use of beverage alcohol is now extensive among American youth of high school age. The incidence of alcohol abuse among young people has prompted the Special Projects Branch to move toward the development of guidelines for this program and to begin to support treatment and rehabilitation projects as components of larger existing programs of services to troubled youth.

During FY 1975, 10 youth applications were reviewed and eight youth projects received support in a total amount of \$2,195,000 (see table 3, p. 36).

Drinking Driver Program

Close collaboration with the National Highway Traffic Safety Administration was maintained for projects which provide drinking driver treatment funds for communities mounting drinking driver identification programs. This mechanism provides a unique means of early detection and intervention in dealing with problem drinkers.

As the projects were implemented, arrests increased and alcohol-related accident rates decreased. More judges and prosecutors have become convinced that the interacting system has merits and has helped to create cooperative relationships among the courts, law enforcement personnel, and the alcohol service programs of the communities. The health care system in most communities benefited from the introduction of new alcoholism treatment facilities and additional funding from NIAAA.

Seventeen drinking driver new and continuation projects were funded in FY 1975 in the amount of \$2,689,000 (see table 2, p. 4). Another 10 grants were active in the amount of \$1,258,000 from previous awards.

Public Inebriate Program

The general objective of the Public Inebriate Program is the rehabilitation of individuals with a public intoxication problem, particularly those living in the subculture of Skid Row. For many individuals the goal of improvement is limited, but some have been significantly helped to avoid deterioration and others to improve their level of functioning sufficiently that they may live outside of the subculture.

Eleven public inebriate projects received support in the amount of \$2,792,000 during FY 1975 (see table 2, p. 4). An additional 16 projects were active from previous awards in the amount of \$5,260,000.

Criminal Justice Alcoholism Program

The criminal justice population addressed in this program is defined as all pretrial releases, probationers, inmates, and parolees who are charged with or convicted of any offense other than simple public intoxication or driving while under the influence of alcohol. It is estimated that the prevalence of alcohol abuse and alcoholism among the criminal justice population is eight times higher than among the general population. Project grants for services tailored to meet the special needs of this population have been awarded. The Institute is also committed to coordinating its efforts in this area with other Federal agencies, principally the Law Enforcement Assistance Administration of the Department of Justice.

In FY 1975, 13 applications were reviewed and six criminal justice alcoholism projects were supported with \$1,431,000 (see table 3, p. 36). An additional seven grants were administered from previous awards in the amount of \$897,000.

Program for the Aged

The problem of alcoholism among aged persons is receiving increasing attention as the total population in this group expands. During FY 1975, one grant was awarded in the amount of \$116,000 for a survey of problem drinking among the aged (see table 3, p. 36).

Joint Alcohol and Drug Abuse Programs

Cooperatively with the National Institute on Drug Abuse, the Special Projects Branch was involved, during FY 1975, in the review of 35 joint alcohol and drug abuse treatment project applications. Few applicants responded to the emphasis in the guidelines on the importance of high-quality evaluation components. For this reason, during FY 1975 only two such projects were funded from this Branch for a total of \$1,086,000 (see table 3, p. 36).

Non-categorical Program

The noncategorical program embraces all projects which do not fit within the definitions of the other programs of the Special Projects Branch noted above.

During FY 1975, 10 such applications were reviewed and one project was funded for a total of \$53,000 (see table 3, p. 36).

TABLE 3. Project demonstration grants, FY 1975

<u>Type of grants</u>	<u>Number</u>	<u>Amount</u>
Cross-population	22	\$ 5,863,000
Criminal justice	6	1,431,000
Blacks	14	3,336,000
Migrant workers	3	309,000
Spanish American	8	1,550,000
Women	13	1,874,000
Youth	8	2,195,000
Aged	1	116,000
Joint program--NIAAA/NIDA	2	1,086,000
Noncategorical	1	53,000
Total grants	78	\$ 17,813,000

DIVISION OF RESOURCE DEVELOPMENT

The Division of Resource Development became operational during FY 1975 and was officially established in early FY 1976.

The Division of Resource Development (1) plans and administers programs for the support of nationwide services for the prevention of alcoholism and the treatment and rehabilitation of alcoholic persons, under the alcohol formula grants to States program, which supports State efforts in planning, establishing, maintaining, coordinating, and evaluating projects for the development of more effective prevention, treatment, and rehabilitation programs to deal with alcohol abuse and alcoholism; (2) develops the policy and regulatory framework for comprehensive State plans for the establishment and delivery of alcoholism services, and reviews and approves individual plans; (3) collaborates with, provides assistance to, and encourages national, State, and local governments, hospitals, and voluntary groups to facilitate and extend programs for the care, treatment, and rehabilitation of alcoholic persons; (4) develops broad programs of training in the field of alcoholism; and (5) administers the program of special grants to States to implement the provisions of the Uniform Alcoholism and Intoxication Treatment Act. In FY 1975, the Division obligated a total of \$66,917,163 (see p. 43).

Training Branch

The extramural training program is an integral part of the total NIAAA program for dealing with problems of alcohol abuse and alcoholism. It is intended to make available better services and research by increasing the knowledge and improving the skills and techniques of persons already in the alcohol field and of professionals and paraprofessionals intending to enter the fields of alcohol-related service and research.

During FY 1975, closer coordination with the National Institute on Drug Abuse was initiated, and a staff member was recruited with a principal responsibility in this area.

Pursuant to the National Research Service Awards Act, 42 USC 2891-1, section 472 of the Public Health Service Act, the Branch initiated support of four institutional research training grants and 20 individual research fellowships. These grants provided both pre- and postdoctoral support. It is hoped that these awards will lead to more and better research in needed areas of new knowledge about alcohol abuse and alcoholism.

Of particular significance are continued efforts to initiate and support training to deal with alcohol problems among minority groups. In addition to other minority training programs, a significant number of new American Indian training programs have been initiated.

In FY 1975 the Institute funded 100 training grants for \$9,355,000 and 22 fellowships for \$244,000. Of the 100 grants, 60 were new, 19 were competing renewals, and 21 were continuations. Sixteen supplemental awards were also made. In addition, the National Center for Alcohol Education (NCAE) received funding of \$1,062,000 for a new contract from the Training Branch (see table 4, p.44); additionally, a modification to the previous year's contract provided NCAE with \$736,000 from other budget activities. In FY 1975, a total of \$10,661,000 was awarded for grants, fellowships, and the NCAE from training funds. In addition to direct training projects mentioned above, four contracts were funded in the amount of \$759,000 for program evaluation. The Training Branch had, during FY 1975, 160 active grants and fellowships amounting to \$14,242,000.

Career Teacher Program

The goal of the Academic Career Teacher Award, funded jointly since 1972 by the National Institute on Drug Abuse (NIDA) and the NIAAA, is to provide support to every medical school and school of public health in the United States to improve the education of students in the area of alcohol and drug abuse. The grant provides for the advanced training of a faculty member nominated by the sponsoring institution. During the 2- to 3-year award period, the institution is required to release the career teacher from activities not directly related to his/her development as an academician and teacher and to provide opportunity for alcohol education in the curriculum of the school.

To date, 37 career teachers have been funded: 20 by NIDA (\$800,000 annual cost); 17 by NIAAA (\$680,000 annual cost). Additionally, NIDA has provided funds at a cumulative cost of \$700,000 to Baylor University Medical School and the Downstate Medical Center to serve as focal points for resource development, evaluation, and coordination of career teacher activities. Five conferences have been sponsored.

Two significant outcomes of the Academic Career Teacher Program are: (1) development, through the training programs designed for career teachers, of a creative, knowledgeable body of professionals deeply concerned about and committed to alcohol and drug education for undergraduates (medical students and students in schools of public health) and residents and to continuing education for the practitioner; and (2) the development of curricula reflecting issues in the addictions within medical schools and schools of public health, tailored to the needs of each school.

Career teachers who have completed or are about to complete their terms of support are developing guidelines for the formation of a professional association to further medical education in the addictive disorders.

State Assistance Branch

Formula Grants

The mission of the State Assistance Branch is to develop a more comprehensive network of services throughout each State in order to provide more effective prevention, treatment, and rehabilitation programs to deal with alcohol abuse and alcoholism. This effort is undertaken by awarding funds, on a formula basis, to the designated agency responsible for the development and implementation of the State Alcoholism Plan in each State. These funds, made available after approval of the plan, are to assist the State in planning, establishing, maintaining, coordinating, and evaluating alcoholism programs.

During FY 1975, a total of \$52 million was awarded to the 50 States, District of Columbia, Puerto Rico, Guam, Virgin Islands, Trust Territory of the Pacific Islands, and American Samoa on the basis of an approved update of the State plan (see table 5, p. 45).

Uniform Alcoholism and Intoxication Treatment Act

During FY 1975, the Branch initiated the Special Grants for Implementation of the Uniform Alcoholism and Intoxication Treatment Act as authorized by 42 USC 4574, section 304 of the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act as amended by Title I of P.L. 93-282. The Special Grants are to assist States which have adopted the basic provisions of the Uniform Act in their efforts to approach alcohol abuse and alcoholism from a community care standpoint. The basic provisions by the State and each of its political subdivisions include decriminalization of public drunkenness and acceptance of individuals into treatment and involuntary commitment. An eligible State may receive an amount up to \$100,000 plus an amount equal to 10 percent of its formula grant allotment for the fiscal year during which application is made. Sixteen Special Grants were awarded in FY 1975. The total amount awarded was \$2,679,163. It is anticipated that an additional six States will qualify for a Special Grant in FY 1976.

The Branch contracted with the International Association of Chiefs of Police to develop a training package for police and police academies. The package will include a training manual and an instructor's guide, which are scheduled for completion during FY 1976. The training program will focus upon the role and

responsibility of police in implementing Uniform Alcoholism legislation. Following field testing of the package, the manuals will be refined and then widely distributed.

A State Alcoholism Program Information System is presently being developed to supply information regarding State alcoholism programs, including information relating to the formula grants to the NIAAA and to the State agencies. The Information System is to be initiated early in FY 1976.

The State Assistance Branch was also responsible for the following grant awards:

U.S. Conference of Mayors

A grant was awarded on March 1, 1975, in the amount of \$189,232 for the first year. Its first year goals are to (1) develop an awareness and leadership among mayors and local officials about alcohol abuse issues; and (2) involve the mayors in developing alternative approaches to comprehensive alcohol abuse services delivery systems in their cities. Project staff has been hired and trained.

National Association of Counties

A grant to increase counties' capacity to initiate, administer, and/or support alcoholism treatment and prevention programs at the county/local level was awarded. The underlying assumption is that more effective programs will be developed if programmatic, legislative, funding, and supportive services are provided to persons in policy-making positions. The grant was awarded on July 1, 1974, for a 3-year period, and a total of \$340,600 has been expended to date. Its chief products this fiscal year were the development of a "how-to" manual for county commissioners and a resource directory of local officials and professional staff (by county). A questionnaire of alcoholism facilities and services is presently being processed for mailing to 3,100 member counties.

The above two grants were funded in FY 1975 from Community Programs (Project grants and contracts line item of the budget, table 1, p. 3).

National Center for Alcohol Education (NCAE)

The NIAAA established the National Center for Alcohol Education (NCAE) in June of 1973. NIAAA formed the Center through a contractual agreement with the University of Research Corporation (URC), a private consulting firm that has specialized in human service programs throughout its 10-year history. NIAAA mandated the Center to research, design, and develop quality training and education programs for people who are striving to increase the

supply of alcohol abuse prevention and treatment workers and improve their skills. The Center also plays a role in the growth and development of an education and training network through its direct assistance to Area Alcohol Education and Training Programs and university summer schools for alcohol studies. In FY 1975, the NCAE was funded by NIAAA in the amount of \$1,798,000, \$1,062,000 was provided from the Training Branch, and \$736,000 from other budget activities for a modification of the previous year's contract.

Located in Arlington, Virginia, the Center employs a staff of 21 persons. It also utilizes the solicited advice of consultants (experts and test groups of consumers) and NIAAA's project and contract officers.

The Center's education and training activities comprise two major task areas designed by the current contract between NIAAA and URC: Experimental Education Laboratory and Curriculum Development.

The Experimental Education Laboratory has completed three courses that address critical training needs among alcohol workers: developing management skills, creating community-wide systems for helping alcoholic people, and strengthening the capabilities of field workers to design and deliver training. The Center also has completed a training program for NIAAA's 28 recently appointed Prevention Coordinators for the Nation's States and territories.

The Curriculum Development unit has completed development of a curriculum called Decisions and Drinking, keyed for women. This presents basic information about the use of alcohol and provides a context in which people may examine their own attitudes about drinking, consider their own personal practices, and consciously choose among the sensible options available.

Area Alcohol Education and Training Programs (AAETPs)

Four Area Alcohol Education and Training Programs (AAETPs), covering all the States and territories, were established to enrich and expand area-wide, State, and local planning and educational efforts, in response to local needs. The first phase of their program was to conduct and analyze an extensive area needs assessment; the second phase was to set program priorities according to the assessed needs; and the third was to establish a sophisticated, long-range approach to meeting education and training needs in future years.

Overall, the needs assessment showed a need for additional training of existing personnel as the highest priority. Counselors in the alcoholism field indicated a need for training in counseling techniques and the assessment of clients for individualized treatment plans, rather than for more knowledge about alcoholism. Community education programs were rated as highly desirable by all

four AAETPs; in particular, there was a concern for programs involving youth. Training and education for personnel working with minority groups were also indicated as high priorities. The AAETPs have used the results of their initial needs assessments to determine priorities for the allocation of their grant funds and to set future program goals.

In FY 1975, NIAAA awarded the AAETPs \$1,425,000. An estimated 10,000 people will receive some form of short or long-term training from the four AAETPs who awarded in FY 1975, 68 subgrants and 93 individual stipend awards. Their awards totaled \$1,365,639 for subgrants and \$246,614 for individual stipends or a total of \$1,612,253. Some funds were carried over by the AAETPs from the previous fiscal year.

Special Division Activities

Under the auspices of the Office of the Division Director, the following grant and contract activities were performed:

State Voluntary Alcoholism Associations

In FY 1975, a grant of \$629,138 was awarded for establishing State Voluntary Alcoholism Associations and evaluating their effectiveness. Five demonstration sites throughout the country were field settings; and, during this first year of function, linkages were developed with public and private alcoholism programs and ground-work was laid for developing additional field sites.

This grant was funded in FY 1975 from Community Programs (Project grants and contracts line item of the budget, table 1, p. 3).

Health Maintenance Organization Programs (HMOs)

A contract was supported to assess alternative levels of intensity of services varying from comprehensive services, including prevention, to minimal services meeting the requirements of the Federal legislation to further the development of HMOs. A detailed demographic investigation was performed in four HMO sites of the subscribers, which included the differences in profiles and the prevalence of problem drinkers and their families. Also, the cost and benefit of alternative levels of care were estimated -- ranging from full range of services, medical and nonmedical treatment, and vocational rehabilitation, to medical treatment and referral, as described in the HMO regulations as minimal requirements for HMOs.

In FY 1975, this contract was continued in the amount of \$82,000. The total contract, that started late in FY 1974, amounted to \$180,276. The findings of this study were useful to the Group Health Association of America (GHAA), which was awarded a grant by the Office of Program Development and Analysis (for details, see p. 9).

Summary of Obligations for Division of Resource Development

Training Programs	\$11,420,000 <u>1/</u>
Formula Grants	52,000,000
Uniform Act - Special Grants	2,679,163
NCAE (Additional funds from Management and Information)	736,000
AAETPs -- \$1,425,000 <u>2/</u>	
HMO contract	<u>82,000</u>
	\$66,917,163

1/ Includes \$759,000 for four (4) contracts of Program Evaluation.

2/ Included in Training Programs.

TABLE 4. Training grants and contracts, FY 1975

<u>Type of training</u>	<u>Number</u>	<u>Amount</u>
Professional	63	\$ 4,103,000
Nonprofessional	31	3,435,000
Professional and nonprofessional	5	392,000
Area alcohol education and training programs (AAETPs)	1 (plus 3 supplements)	1,425,000
Subtotal--training grants	100	\$ 9,355,000
Fellowships	22	244,000
National Center for Alcohol Education (NCAE)--contract	1	\$ 1,062,000 ^{1/}
Subtotal--grants, fellowships, and NCAE	123	\$ 10,661,000
Program evaluation contracts	4	759,000
Total grants and contracts	127	\$ 11,420,000

^{1/} Additional \$736,000 from Management and Information Program grant funds for a total of \$1,798,000 for NCAE.

TABLE 5. State Formula Grants, FY 1975

Alabama	\$ 1,021,776	Nebraska	\$ 375,129
Alaska	200,000	Nevada	200,000
Arizona	509,012	New Hampshire	200,000
Arkansas	597,514	New Jersey	1,575,040
California	4,538,653	New Mexico	308,111
Colorado	577,830	New York	3,885,279
Connecticut	646,287	North Carolina	1,419,417
Delaware	200,000	North Dakota	200,000
District of Columbia	200,000	Ohio	2,525,429
Florida	1,873,231	Oklahoma	707,498
Georgia	1,259,682	Oregon	546,890
Hawaii	200,000	Pennsylvania	2,824,083
Idaho	206,555	Rhode Island	230,556
Illinois	2,440,628	South Carolina	779,605
Indiana	1,290,725	South Dakota	200,000
Iowa	715,002	Tennessee	1,139,110
Kansas	546,839	Texas	3,012,761
Kentucky	926,542	Utah	312,377
Louisiana	1,054,566	Vermont	200,000
Maine	280,512	Virginia	1,186,548
Maryland	914,567	Washington	809,979
Massachusetts	1,303,881	West Virginia	501,252
Michigan	2,049,669	Wisconsin	1,117,730
Minnesota	945,147	Wyoming	200,000
Mississippi	711,404	Guam	28,884
Missouri	1,160,285	Puerto Rico	882,291
Montana	200,000	Virgin Islands	22,716
		American Samoa	9,251
		Trust Territory Pacific	29,757
		Total grants	\$ 52,000,000

DIVISION OF PREVENTION

The National Institute on Alcohol Abuse and Alcoholism has established two overall principal objectives, one immediate and the other long range. The immediate goal is to make available treatment and rehabilitative services to alcoholic people and problem drinkers by mobilizing existing resources at the Federal, State, and local level, and developing a broad range of community alcoholism treatment and rehabilitation programs.

The second, and longer-range, goal is the development of effective and practical methods of preventing the abuse and misuse of alcoholic beverages and the testing and evaluating of the effectiveness of these methods.

The Division has the responsibility for Youth Education, Community Prevention and Training, and for supervising the activities of the National Center for Alcohol Education.

A total of \$10,266,000 was expended for Prevention grants and contracts in FY 1975. This consisted of 46 grants funded in the amount of \$5,899,000, of which 18 were for Youth Education grants amounting to \$2,880,000, and 28 were for Community Prevention grants amounting to \$3,019,000 (see table 2, p. 4), and seven contracts in the amount of \$4,367,000 (\$261,000--Youth Education Branch; \$437,000--Community Prevention Branch; and \$3,669,000--Clearinghouse contract). In addition to the 46 grants awarded, 36 grants were active and administered from previous awards in the amount of \$2,203,000.

Youth Education Branch

In order to prevent increasing numbers of alcohol abuse problems among the Nation's youth, a number of factors must be considered. These include: educational and informational needs, environmental and social factors, physiological and psychological needs, and legal and economic realities. One isolated approach will probably not be successful in reducing alcohol problems. However, through its leadership role in attempting to develop strategies to reach children and youth, the NIAAA has been able to initiate efforts on a number of different levels.

During FY 1975, the Youth Education Branch attempted to identify and pursue a wide variety of conduits for reaching youngsters. These conduits included parents, peers, teachers, health care providers and other adults who are recognized by youngsters as role model or leaders. During this period the Youth Education Branch reviewed 53 grant applications, of which 18 were funded in the amount of \$2,880,000 -- 24 were disapproved, and 11 were

deferred for further development. The staff continued to work closely with the 18 funded grantees, providing the project directors, as well as other individuals active in the field, with the latest materials available for working with youth. These have included an updated education bibliography and audiovisual guide and resource materials, including "Alcohol and Alcohol Safety," "Teaching About Drinking," "Teenagers: The New Alcoholics," "You and Your Alcoholic Parents," "Drinking Myths," and "Becoming Naturally Therapeutic." Also during FY 1975 the University of Michigan, under a grant from NIAAA, completed the development of six trigger films to be used with high school students. During FY 1976 these will be distributed by the National Clearinghouse for Alcohol Information (NCALI).

In addition to the above, two new major program activities were developed and implemented by the Youth Education Branch, during FY 1975, with the support of the NCALI's Information Dissemination Program. These have included outreach efforts directed toward national youth-serving organizations and a second effort directed toward college and university campuses.

While these two efforts have not represented major commitments of funds, they have amassed impressive results in terms of interest generated and programs initiated by the groups with whom we have had contact.

A National Youth Conference was held on March 21-23, 1974, attended by representatives and leaders from 46 national youth groups. As a result of this Conference, 15 of the most interested organizations were selected for continued followup in incorporating alcohol education into some of their ongoing programs.

Under the project entitled "University 50 + 12," 63 campuses were visited for the purpose of initiating dialogue on the topic of drinking practices on the college campuses. Data were collected about programs already in progress, and information about alcohol and alcohol problems was distributed to students, faculty, and administrative representatives. A liaison person for continuing communication with NIAAA was designated by the president of each university. As a result of these visits, an Editorial Board has been formed, and staff at the NCALI are currently in the process of developing a handbook of prevention models which can be implemented on university campuses with limited resources. A national seminar planned for November 21-23, 1975, at the University of Notre Dame in South Bend, Indiana, will be convened for the purpose of stimulating interest in the handbook and training liaison representatives and students in methods to implement the models described in the handbook.

In addition to the 18 grants in the amount of \$2,880,000, one contract in the amount of \$250,000 was supported to develop community information and followup components of the alcohol segment of a TV health series, and an addition of \$11,000 was made to an existing contract to the National Congress of Parents and Teachers for the development and implementation of an alcohol education program for parents and school children (see footnote, table 2, p. 4). The total contract to the National Congress of Parents and Teachers amounted to \$108,765, of which \$97,765 was awarded in FY 1974 and \$11,000 in FY 1975. There were also three active grants from previous awards in the amount of \$223,000.

Community Prevention Branch

The goal of the Community Prevention Branch is the development of effective programs in preventing the misuse of alcoholic beverages. Its concerns are the health education of the community in regard to the use, misuse, and non-use of alcohol. The scope of its activities are directed to the entire community population.

During FY 1975, the Community Prevention Branch continued to encourage more comprehensive prevention programming as indicated in our Statement of Policy which includes: altering the social environment, strengthening community resources, and strengthening individual resources. The Branch particularly encouraged the development of those projects that highlighted the public character of alcohol problems, showing it to be a community problem, as well as an individual one, requiring a comprehensive approach to its mitigation.

A major endeavor of the Community Prevention Branch during FY 1975 was the designing of a program to train State Prevention Coordinators in the area of primary prevention activities. Twenty-four coordinators were trained. Two groups of 12 each attended two phases of training that were separated by several months of field experience. In this program the coordinators were prepared for giving direction to programming related to public education, public discussion, a community study of its drinking patterns, the development of strategies to prevent drinking problems, and other actions designed to minimize the abuse of beverage alcohol.

Yearly work plans were submitted to the State Prevention Coordinators stating their plans for a 12-month period. Quarterly reports also were submitted outlining their plans in the areas of public education, public dialogue, assessment of needs, analysis of community drinking patterns, and the recommendations of the communities for modifying their local drinking patterns.

Fifty-four grant applications were received by the Community Prevention Branch during FY 1975. Twenty-eight applications were approved and funded at a cost of \$3,019,000. An additional 33 grants were administered from previous awards in the amount of \$1,970,000.

In addition to the 28 grants, the Branch supported four contracts in the amount of \$437,535. One contract in the amount of \$295,160 was awarded to conduct a study of actual effects of alcohol beverage control (ABC) laws and to determine if the role of the law can be used as a prevention strategy. The remaining three contracts were related to activities conducted through the Clearinghouse -- one, in the amount of \$62,275, to develop printed materials on alcoholism in Spanish; one in the amount of \$78,624 to maintain stocks of NIAAA brochures in racks in supermarkets in various cities, primarily along the East Coast; and one was a modification in the amount of \$1,476 for writing of brochures on prevention, presentation of slide shows on prevention for the Navy, and writing of fact sheets on various aspects of alcoholism. This was a modification of an existing contract that was awarded in FY 1974 in the amount of \$17,176.

National Clearinghouse for Alcohol Information (NCALI)

The National Clearinghouse for Alcohol Information is an information service of NIAAA established to search out worldwide information on alcoholism prevention, treatment and research, and to share this knowledge with the professional community and the general public.

Fiscal year 1975 was NCALI's third full year of operation. It was funded during this time by a \$3,669,000 cost-plus-award-fee contract with the General Electric Company. During the year the contract was opened up for competitive bidding, and proposals for the operation of the Clearinghouse were submitted by various firms. At the conclusion of a technical review and evaluation of the proposals, the contract was again awarded to the General Electric Company.

During FY 1975 the Clearinghouse continued its efforts to provide such services as:

- Engaging in an aggressive outreach program to seek potential users of Clearinghouse services.
- Publishing an Information and Feature Service and a quarterly bulletin offering news of developments and state-of-the-art reports.
- Assembling bibliographies on various aspects of alcohol and alcoholism and supplying abstracts of studies in specific alcohol-related areas.

- Spreading the NIAAA theme of responsible drinking through public service announcements, posters, and other materials distributed for use by local alcoholism groups and the media.
- Assisting NIAAA's prevention program through an Information Dissemination Program designed to enlist the aid of such organizations as universities, industries, and national youth organizations in the campaign against alcoholism.

Acquisition and Processing of Literature

As an information center, the Clearinghouse collects literature on all aspects of alcohol and alcoholism from all possible sources around the world. NCALI's information system centers around a reference library and a data repository which contain more than 46,000 items, including books, audiovisuals, journals, magazines, lay literature, microfilm, and abstracts of documents. During FY 1975, some 5,300 items were added to the collection, ranging over such fields as research, education, grant information, and legislation. The reference library is used by NIAAA and by researchers from around the world.

The information is gathered, processed, analyzed, and entered into a computer data base. A Quality Evaluation System, initiated in FY 1974 and refined during FY 1975, evaluates literature acquired by the Clearinghouse.

Reference Services and Processing of Requests

The Clearinghouse reviews and processes thousands of requests each month from researchers, physicians, alcoholism counselors, program administrators, clergy, educators, students, and the general public. In FY 1975, NCALI answered 127,000 requests with 3,620,000 information items.

During FY 1975, the Clearinghouse reference service completed work on State Fact Finders for all States and outlying United States territories. These summaries are used by State alcoholism agencies, program administrators, Congress, and others to obtain current information on alcohol legislation, finances, personnel, and programs in each State.

Current Awareness Services and Materials

The Current Awareness Service is responsible for providing key groups in such fields as medicine, law enforcement, social work, and industry with greater knowledge and insight into the alcoholism problem. The purposes of Current Awareness are to search out new users of the Clearinghouse services and to keep registered users up to date on new developments.

To help workers in the alcoholism field keep abreast of recent developments, the Clearinghouse prepares two publications. An Information and Feature Service provides brief reports on treatment and prevention, new publications, meetings, grants, and other information. During FY 1975, mailings reached 52,000 registered users. A quarterly bulletin, Alcohol Health and Research World, provides indepth information on such topics as alcohol and women, and research and treatment innovations. A total of 42,000 bulletins were sent out in FY 1975.

Current Awareness Service provides two additional channels to keep its users informed. Group Interest Guides are bibliographic updates of new documents in 15 categories. During FY 1975, Guides were mailed on a scheduled basis to an average of 5,600 persons (29,905 Guides per mailing -- each receiving several guides depending upon the specific field of interest). Individualized Interest Cards are issued monthly and allow subscribers to be more selective in choosing topics of interest. In FY 1975, Individualized Interest Cards were mailed to an average of 5,500 persons per month. Through its varied services and materials, Current Awareness contacted more than 121,000 potential users during FY 1975.

Information Dissemination Program (IDP)

During FY 1975, the Clearinghouse expanded and strengthened its Information Dissemination Program. At the core of this program is a plan to communicate NIAAA messages through such organizations as industrial firms, schools, colleges, service clubs, and professional groups. The goal is to make these organizations aware of the impact of alcoholism and alcohol-related problems in America and to get their commitment to take action.

The following are highlights of various projects undertaken in FY 1975 as part of the Information Dissemination Program:

1. Radio and TV Spot Distribution. IDP staff undertook personal deliveries of NIAAA public service announcements to stations across the country to insure saturated distributed and maximum airtime, to motivate increased broadcast programming at local levels, and to involve State and local alcohol organizations in distribution of spots to stations.
2. Sunday Supplement. A publication on alcohol was prepared and disseminated as a test case in the Sunday Columbus, Ohio Dispatch. The purpose of this project was to replace popular myths about alcohol with facts, to promote responsible decisionmaking about alcohol to a large public audience, and to evaluate the use of supplements in newspapers as an educational device.

3. University 50 + 12. During FY 1975, Clearinghouse staff visited 63 major universities (minimally one in each State). The main objectives of the visits were to disseminate alcohol information to universities, to foster the establishing of alcohol-related projects on campus, and to gather information about existing projects. The material and program ideas collected during the visits were drafted into a University Program Manual to be used by faculty and student groups in setting up alcohol education projects on campus. Followup plans for FY 1976 include holding a seminar focusing on how to use the manual and expansion of the program to additional universities.

4. Youth Organizations. The objectives of this project are to develop creative ideas for programs which youth organizations can implement, to involve members of youth organizations in alcohol-related projects, and to integrate alcohol education activities into organizations' existing programs. As part of this effort, a national "Face to Face" conference was held in Washington, D.C., bringing together youth and adult representatives from some 60 national youth organizations.

5. Women and Alcohol. During FY 1975, the Clearinghouse began a special effort to focus the attention of the media on the problem of women and alcohol abuse. As part of this project, NCALI developed a multimedia package for dissemination to broadcast/print media and broadcast industries and prepared a special information package on alcohol and women for national women's organizations. As a result of this effort, a number of network and nationally syndicated radio and television programs were produced, including a segment of the Mike Douglas show.

6. Foundations. The goal of this project is to encourage foundations to include alcohol considerations in areas already being funded, such as child abuse, and to set a climate among selected foundations which will be receptive to funding new alcohol-related activities. During FY 1975, NCALI researched 75 foundations and conducted indepth interviews with executives of 30 of the most promising organizations. Ten of these were selected to begin establishing a "working partnership" with NIAAA which would ultimately lead to sources of funding for alcohol programs.

7. Field Representatives. During FY 1975 the Clearinghouse initiated a pilot project in Texas to test the feasibility of maintaining regional staff to help implement IDP projects on the local level. The success of the pilot project led to the establishment of five field representatives around the country. The priorities of the field representatives include building a communications network throughout each sector and developing and implementing NIAAA/NCALI projects that have broader application and can be replicated in other States.

Other Clearinghouse Programs

The Clearinghouse operation encompasses several other programs and support services, including the following:

- NCALI serves as a Clearinghouse for the Department of Transportation's National Highway Traffic Safety Administration (NHTSA). This project involves warehousing of NHTSA standard pamphlets, responding to NHTSA inquiries from the general public, responding to technical inquiries involving searches and correspondence, and including technical articles in Clearinghouse publications.
- The Clearinghouse supports NIAAA's interagency agreement with the U.S. Navy's Alcoholism Prevention Program through the preparation and dissemination of special information material, as well as inclusion of all pertinent Navy installations on NCALI mailing lists.
- The Clearinghouse maintains a program of quality assurance to assess the overall operation, performance, and adequacy of services. This group is concerned with the timely and appropriate response to all inquiries, as well as with the Quality Evaluation System to evaluate alcoholism literature.
- The Clearinghouse provides support to NIAAA's Occupational Programs Branch in the development and dissemination of information materials to business, industry, and labor.

DIVISION OF RESEARCH

Extramural Research Branch

During FY 1975, the Extramural Research Branch was responsible for reviews of 263 requests for research grants for projects on a wide variety of problems associated with the use and abuse of alcohol. Seventy-four applications for new and renewal grants were recommended for approval which, added to 34 approved applications carried over from previous fiscal years, totals 108.

By the end of FY 1975, 156 grants and three contracts were awarded totaling \$10,681,000 (see table 6, p. 56). Of these awards, 79 were continuations in the amount of \$5,690,000, 24 competing renewals for \$2,260,000, 53 new grant awards for \$2,332,000, and three contracts for \$229,000. Supplemental awards, including a chairman's grant for the Internal Review Group responsible for the scientific review of applications, amounted to \$170,000.

Grants for University-Based Centers

During this FY 1975 period, funding was continued for one university-based center to support the multidisciplinary research of alcoholism as it relates to such areas as aging, suicide, criminality, genetics, psychology, and physiology in both humans and animals. Continuation funds were also provided to a former center to complete clinical studies involving psychotherapy and genetic-biological correlates of alcoholism.

Biomedical Studies (biological)

Almost half of the Research Division grants were awarded for basic and applied biological research of alcohol effects. Projects studying the etiology of liver cirrhosis and other alcohol-related diseases have been very successful and continued support for research in this area is being maintained. Also, new projects in the areas of alcohol and drug metabolism, biogenic aldehydes as they relate to addiction and alcohol-induced losses in learning and memory efficiency promise to yield greater insight into the physiological mechanisms of addiction and chronic loss of memory.

Continued research on intra-uterine effects of alcohol was ensured by the funding of two new projects to study alcohol intake in pregnancy and the effects of chronic alcohol consumption on the offspring's development, survival, and behavior.

Behavioral Studies

Areas of high priority in the field of behavior continue to include studies on drinking practices and attitudes toward alcohol among teenagers and youth. Other areas of increased support include two new grants for the study of the effects of alcohol on perceptual and cognitive performance during the menstrual cycle and research into the definition and interaction of a wife and her alcoholic husband. The area of alcoholism and effects of alcohol on women is not sufficiently studied and more research is needed.

Studies of Treatment (clinical)

The Extramural Research Branch continues to realize the need for improved methods of treatment. To this end, funding is maintained for the ongoing studies on lithium and disulfiram in the treatment of chronic alcoholism. In addition, two new aspects of the behavioral-psychiatric approach to treatment include the studies of other innovative, behavioral techniques as therapy for alcoholism. Preliminary results in these areas have been very promising, indicating the need for more emphasis on these approaches.

Prevention and Education, Community Research, and Epidemiological Studies

The remaining grant research categories funded in FY 1975 focused on prevention and education, community system, and epidemiological studies.

A new project is in progress in conjunction with the Division of Prevention involving liquor control that will determine the relationships between types of alcohol beverage control (ABC) systems and mean consumption levels, and another project studying the drinking patterns and criminal careers will offer greater insight into the identification of potential alcoholic persons. Renewed interest was shown in ethnic studies which warrants the continuation of research efforts in the areas of drinking problems among urban Indians; in rural communities, and among black collegians.

TABLE 6. Extramural research grants and contracts, FY 1975

<u>Type of awards</u>	<u>Awards</u>		<u>Obligations</u>	
	<u>Number</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Biological	58	39	\$ 3,295,000	32
Behavioral	26	18	1,512,000	15
Clinical/medical	26	18	1,740,000	17
Clinical/psychological	18	12	1,497,000	15
Epidemiology	10	7	762,000	8
Service delivery	4	3	247,000	2
Other	5	3	1,120,000	11
Research grants	147	100	10,173,000	100
Research scientist development awards	9		259,000	
Subtotal -- Grants	156			
Supplement to Initial Review Committee grant (Chairman's grant)	(1)		20,000	
Contracts	3		229,000	
Total grants and contracts	159		\$10,681,000	

Intramural Research Programs

Laboratory of Alcohol Research

During FY 1975, the work of the Laboratory of Alcohol Research was reviewed by a distinguished committee of outside scientists, which included three Nobel laureates. The committee met and made recommendations for the program of the Laboratory. Their recommendations are summarized as follows:

- The effectiveness of the program is severely compromised by the location of the Laboratory at Saint Elizabeths Hospital, and it should be moved to a site either on or near the main NIH campus, where scientific interaction and general hospital facilities are available for the care and study of medical complications of alcoholism.
- The Laboratory should continue its policy of regular reviews by panels of independent outside scientists, who should evaluate the competence and relevance of the work of the Laboratory, make suggestions for new programs and personnel, and recommend termination for programs and personnel which in their judgment are not productive.
- The Laboratory should continue its efforts to attract scientists of the highest caliber from a number of disciplines to conduct research on problems of the most fundamental nature and the greatest degree of difficulty which are currently soluble and to serve as a source of scientific and technical information to those administering the overall programs and formulating policy for the Institute.
- The Laboratory should serve as a training program for a limited number of professionals who plan to make a career of either research in or care of patients suffering from the consequences of alcohol abuse.

To implement the recommendations of the review panel, the following steps have been taken:

- The Institute is currently negotiating for space for the care of a small number of patients and conduct of research on the medical complications of alcoholism, to be allocated from within the space currently occupied by ADAMHA within the Clinical Center of the NIH. Additional rental space to house the remainder of the Laboratory is being sought near the NIH campus.

- Sixteen new positions for the Laboratory have been requested for FY 1976 (in addition to the six full time and five part time positions comprising the total staff during FY 1975), along with significant budget increases.
- Four research sections as originally planned have been requested for the Laboratory: Metabolism, Psychology, Neuroscience, and Clinical Research. Recruiting efforts to staff these sections are underway, but remain severely hampered by the limitations on space. The Metabolism program, already active in FY 1974, continues to be the only functioning program of the Laboratory, although a senior psychologist was appointed late in FY 1975 to initiate the Psychology research program.

Expenditures for the Intramural Program

During FY 1975, personnel costs for the Laboratory of Alcohol Research were \$232,000. Other direct operations for the Laboratory and payments for maintenance support and administrative services for the facilities at Saint Elizabeths Hospital totaled \$186,000. Total expenditures for this intramural research program during FY 1975 were \$418,000 (see table 1, p. 3).

Metabolism Program

Alcoholism, while not classified as a metabolic disease because alcohol is largely exogenous in origin, nevertheless closely resembles a metabolic disorder in its course. The initial research of the Metabolism program focuses on problems related to the toxic effects of alcohol on a number of metabolic systems. The first of these areas is the relationship of ethanol to fat metabolism. In particular, the Laboratory is investigating the mechanisms whereby ethanol ingestion leads to fatty liver and, in some cases, to hyperlipidemia. The second problem currently under investigation in the Laboratory is the well-known shift of the redox state of the cytoplasmic pyridine nucleotides during alcohol ingestion. It is suspected that this fundamental change induced by alcohol is involved in the numerous abnormalities seen after alcohol consumption, including decreased urea synthesis, decreased protein synthesis, decreased glucose synthesis, and decreased oxidation of fats. The third major line of investigation within the Laboratory bears on the interpretation of the measured values of aldehydes in biological material. There are currently a number of major hypotheses which place measured acetaldehyde (the first substance produced during the metabolism of alcohol) in a central position in several aspects of alcoholism and alcohol-related problems. However, measurements of this metabolite are extremely difficult and at this time remain

technically unsatisfactory. The Laboratory is currently attempting to resolve some of these difficulties so that these interesting and medically relevant hypotheses may be experimentally tested.

Laboratory staff has also been pursuing investigations of the mode of alcohol's action upon brain by utilizing an animal model of withdrawal developed earlier in this Laboratory. These studies include investigations of the effects of alcohol on neurotransmitters, tests of the effectiveness of various chemical agents in ameliorating the alcohol withdrawal syndrome, and attempts to determine the source of the methanol or "wood alcohol" which accumulates in the body during prolonged alcohol intoxication.

Psychology Program

Initial plans have been developed during FY 1975 for this new program and call for research into some of the behavioral and hormonal events occurring during important periods of development of the individual and the effects of alcohol during those periods. There is good reason to believe, for example, that there may be profound and tragic effects on the developing fetus when the mother drinks heavily during pregnancy. Another critical period occurs during the onset of puberty, when the individual undergoes major psychological and endocrine changes and a sudden spurt in physical growth occurs. While little is now known concerning possible lasting effects of alcohol consumed during this period, it is a topic of great importance, especially in light of recently reported increases in teenage drinking in this country.

The Psychology program will also investigate mechanisms underlying the influence of certain environmental influences on alcohol consumption. It is known, for example, that the laboratory rat will drink significantly more alcohol if it is housed in complete darkness. Since darkness is known to influence various neuro-endocrine systems of the organism, it may be possible to elucidate a relationship between such systems and the regulation of drinking behaviors. Another environmental factor which will influence the amount animal species drink is the schedule of feeding. A technique to induce increased alcohol intake in the normally resistant rat has been developed from this finding and is known as "scheduled-induced polydipsia." This technique will be useful in studying behavioral and hormonal causes and effects of alcohol consumption in laboratory animals.

Studies with human subjects must await the availability of appropriate research facilities.

Neuroscience Program

Studies will be directed toward understanding the basic mechanisms governing neurologic complications of alcohol addiction and withdrawal, including molecular components involved in each of these processes. In addition, investigations will be conducted of genetic factors influencing alcohol consumption. Initiation of this program awaits the availability of space and subsequent recruitment of staff.

Clinical Research Program

This program will be concerned with the treatment and care of individuals with alcohol-related diseases of the liver, brain, and heart, in a general hospital setting. In addition, it will perform research on alcoholic patients designed to elucidate the clinical disease states induced by alcohol consumption and will serve as a national center for training individuals in the care and treatment of alcoholic persons. This program, of crucial importance to the future development of the Laboratory, requires that appropriate space for clinical research with a small number of patients be obtained in a general hospital setting, such as the Clinical Center at NIH.

Publications

Of the four programs described above, only the Metabolism program was functional during FY 1975. Publications resulting from the work of this group are as follows:

- Berdanier, D.C.; Tobin, R.B.; Nielsen, R.C.; Mehلمان, M.A.; and Veech, R.L.* Effects of polychlorinated biphenyls and thiamin deficiency on liver metabolism in growing rats. J. Toxicol. Environ. Health 1, 1975. pp. 91-105.
- Cornell, N.,* and Veech, R.L.* Equilibrium Constants and Michaelis Constants for Mitochondrial Enzymes. Handbook of Cell Biology. (Altman, P., ed.). Fed. Am. Soc. Exp. Biol., Bethesda (In Press), 1975.
- Cornell, N.,* and Veech, R.L.* Modifications of the enzyme assay for inorganic phosphate. (In preparation for Anal. Biochem.), 1975.
- Cornell, N.,* Lund, P.; Stubb, M.; and Krebs, H. The Cause of Inhibition of gluconeogenesis by ethanol. (In preparation for Biochem. J.), 1976.
- Cornell, N.,* and Harris, R. Enhancement of the Inhibitory Effects of Ethanol on Fatty Acid Oxidation by Lysine. (In preparation for Biochem. J.), 1975
- Cornell, N.,* Leadbetter, M.;** Krebs, H.A.; and Veech, R.L.* The variation of the equilibrium constants of the glyceraldehyde 3-phosphate dehydrogenase and 3-phosphoglycerate kinase reactions with free magnesium concentrations. (In preparation for Biochem. J.), 1976.
- Guynn, R.W., and Veech, R.L.* Measurement of malonyl coenzyme A. Methods in Enzymology 35, 1975. pp. 312-315.
- Hunt, W.A., and Majchrowicz, E.* Alterations in the turnover of brain norepinephrine and dopamine in alcohol dependent rats. J. Neurochem. 23, 1974. pp. 549-552.
- Karoum, F.; Majchrowicz, E.;* and Wyatt, R. Brain concentrations of biogenic amine metabolites in acutely treated and ethanol dependent rats. Submitted for publication in the British Journal of Pharmacology.
- Lakshmanan, M.R.,* and Veech, R.L.* Short and Long Term Effects of the in vivo Administration of Ethanol Upon Rat Liver HMG-CoA Reductase and Cholesterol 7 Hydroxylase (Submitted to J. of Lipid Research), 1975.

- Lakshmanan, M.R.,* and Veech, R.L.* Measurement of the Rate of Rat Liver Sterol Synthesis in vivo Using Tritiated Water. (In preparation for J. Biol. Chem.), 1975
- Lakshmanan, M.R.,* and Veech, R.L.* Effects of an Acute Dose of Ethanol Upon the Number of Tritium Atoms Incorporated into Cholesterol During its Biosynthesis from Mevalonate by Rat Liver in vivo. (In preparation for National Council on Alcoholism Symposium), 1975.
- Lawson, J.W.R.;** Guynn, R.A.; Cornell, N.;* and Veech, R.L.* A possible role for pyrophosphate in the control of hepatic glucose metabolism. Gluconeogenesis (Mehlman, M.A., and Hanson, R.A., eds.). Wiley, New York, (In Press), 1975.
- Majchrowicz, E.* (ed). Biochemical Pharmacology of Ethanol. Adv. in Exp. Med. and Biol. Vol. 56. Plenum Press, New York, 1975.
- Majchrowicz, E.* (ed). Metabolic correlates of ethanol, acetaldehyde, acetate and methanol in humans and animals, Biochemical Pharmacology of Ethanol, Plenum Press, New York, 1975. pp. 111-140.
- Majchrowicz, E.* Induction of physical dependence upon ethanol and associated behavioral changes in rats. Psychopharmacol. 43, 1975. pp. 245-254.
- Majchrowicz, E.* Effect of peripheral metabolism on the central nervous system. Fed. Proc. 34, 1975. pp. 1948-1952.
- Miller, A.L.; Hawkins, R.A.; and Veech, R.L.* Decreased rate of glucose utilization by rat brain in vivo after exposure to atmospheres containing high concentrations of CO₂. J. Neurochem. 24, 1975. pp. 1-6.
- Nielson, R.H.; Hawkins, R.A.; and Veech, R.L.* The effects of acute ethanol intoxication on cerebral energy metabolism. Alcohol Intoxication and Withdrawal: Experimental Studies II, (Gross, MM. ed.). Adv. Expt'l Med. & Biol., Vol. 59, Plenum Press, New York, 1975. pp. 93-109.
- Veech, R.L.;* Hawkins, R.A.; and Nielsen, R.C. A comparison of the metabolic effects of bovine growth hormone and growth factor from spirometra mansoni on rat liver in vivo. J. Toxicol. Environ. Health 1, 1975. pp. 2-14.
- Veech, R.L.* Research plans and goals of the Laboratory of Alcohol Research. Proc. N.Y. Acad. Sci. (Seixas, F., ed.). New York. (In Press), 1975.

Veech, R.L.* Sucrose as a stimulant of hepatic fatty acid synthesis. Sweeteners: Issues and Uncertainties (White, R.W., ed.). National Acad. Science, Washington, D.C., 1975, pp. 113-115.

Veech, R.L.* Ethanol as an environmental toxin. Proc. NCTR Conference (Archer, O., ed.), 1975.

Veloso, D.,* and Veech, R.L.* Stoichiometric Hydrolysis of Long Chain Acyl-CoA and Measurement of the CoA Formed with an Enzymatic Cycling Method. Analytical Biochemistry 62, 1975. pp. 449-460.

Veloso, D.,* and Veech, R.L.* Enzymatic Determination of Long-Chain Fatty Acyl-CoA. Methods in Enzymology. Academic Press, New York, 1975. p. 273.

* Full-time staff of the Laboratory of Alcohol Research.

** Part-time staff of the Laboratory of Alcohol Research.

Names not annotated are outside collaborators.

PUBLIC AFFAIRS

During FY 1975, the Institute's Public Affairs Program continued to encompass a wide range of efforts designed to increase public awareness of the facts about alcohol use and abuse and to develop and disseminate public information materials to enable the general public to make responsible decisions about the use or nonuse of alcoholic beverages.

Functions performed were in the following areas:

- Collection, dissemination, and coordination of public information
- Public awareness information campaign
- Media contacts
- Preparation and clearance of publications
- Support services

Public Service Education Campaign

NIAAA's nationwide public awareness campaign entered its third full year with the development of additional radio and television public service announcements. The radio materials included several of the most effective information pieces used in the previous year. To help electronic broadcasters, NIAAA developed a "Handbook" in both English and Spanish. The "Handbook" provided broadcasters editorial materials on the myths and facts about alcohol use and abuse and ideas for local programming. For television, NIAAA produced 13 public awareness spots, including several in Spanish.

Also during FY 1975, the radio series "All About Alcohol" answered the most asked questions sent in by the general public. The series was used by approximately 3,500 radio stations. This included the Armed Forces radio service.

Media Contacts

A major responsibility of Public Affairs was to coordinate speaking engagements, newspaper and magazine interviews, and appearances on radio and television for the Institute Director and senior staff members. In FY 1975, a program of media contact was continued as part of the Institute's overall effort to raise the public awareness level of alcoholism problems. Because of the excellent quality of materials made available to both radio and television during this fiscal year, NIAAA received a large share of the highly competitive public service time made available by the electronic media to non-profit organizations.

Through the coordinated efforts by Public Affairs, the Institute's role in the Nation's alcohol problem was given high visibility in such major publications as Time, U.S. News and World Report, New York Times, Los Angeles Times, and Chicago Sun-Times.

There has been an increase in alcohol use among youth and women over the past year. The Office of Public Affairs responds to approximately 100 requests a week from reports from all media. They were interested in NIAAA thrusts, policies, and general statistics.

Publications

One of the major functions of Public Affairs has been its role in the preparation of publications to respond better to the ever-increasing interest in alcoholism by professionals and the general public. While much of this responsibility was shifted to the Division of Prevention during FY 1975, Public Affairs did provide coordination of many publications of the Institute.

Support Services

An essential responsibility of Public Affairs was to provide professional communications and information services for the staff of NIAAA.

Public Affairs gave programmatic and technical advice to the Division of Prevention and the Office of Education in the production of the series of films for Junior and Senior High School alcohol curricula.

Technical Assistance

Public Affairs supported a 3-year grant awarded in FY 1974 to the National Council on Alcoholism in the amount of \$1,549,035, of which \$569,110 was expended in FY 1975, to act as advocate, initiator, catalyst, and provider of technical assistance in mobilizing local-level volunteer groups nationwide for improved alcoholism information, dissemination of alcoholism education and prevention materials. In addition, technical assistance was provided to the National Council on Alcoholism-Alaska Region (NCA-AR) on a program funded in FY 1974 in the amount of \$1,500,000 for a period of 2 1/2 years to support a public education and information campaign.

During FY 1975, monitorship of a contract was performed in conjunction with the Department of Transportation's National Highway Traffic Safety Administration, for a nationwide alcohol abuse and alcoholism public service campaign to raise the level of the public's awareness of the potential dangers of alcohol abuse. The contract amounted to \$1,391,287, of which DOT reimbursed NIAAA in FY 1974 in the amount of \$642,209.

Public Affairs also provided technical assistance to the National Center for Alcohol Education and on NIAAA division-level activities.

INTERNATIONAL ACTIVITIES

Through international cooperation, the nations of the world are provided with an opportunity to use a variety of resources to consider common concerns in the area of alcoholism treatment and research. Toward this end, the NIAAA funded a variety of studies to stimulate and support multinational cooperation in undertaking basic and applied research concerning the causes of the most effective methods of combating alcohol abuse and alcoholism. In addition to a number of ongoing studies, several new projects were begun in FY 1975.

International Grants:

Effects of Ethanol on Amino Acid Metabolism. Sir Hans Krebs, Oxford University, England, 12/1/73 - 11/30/76. This grant to Dr. Krebs, a Nobel Laureate and the Principal Investigator, is in its second year.

The objective of this work is to evaluate influence of ethanol addition upon nitrogen metabolism of perfused rat livers. Mechanisms whereby addition of ethanol to the perfusate results in the accumulation of such amino acids as aspartate, glutamine, and glutamate will be ascertained. Influence of ethanol on isolated in vivo experiments are proposed to be conducted to determine whether effects observed in isolated perfused livers can be observed in vivo.

Earlier work has shown lysine to accelerate glucose synthesis from lactate and to abolish the inhibition caused by ethanol. Under this grant during the past year, the investigators have made a more complete analysis of the interaction between lysine and ethanol. It has been shown that several other amino acids (including asparagine, ornithine, tyrosine, arginine, alanine, phenylalanine and proline) have similar effects.

Results of work to date lead to the conclusion that the reactions which re-establish redox equilibria take precedence over other reactions such as glucose synthesis. This implies that there is competition for intermediates common to two or more metabolic sequences.

The findings during the past year contribute to the analysis of the manner by which ethanol disrupts liver metabolism and how some of the effects can be counteracted. Publications include a paper on the accumulation of aspartate in the presence of ethanol in rat liver and a report describing a device for the separation of isolated hepatocytes or similar tissue fragments for analysis of cell constituents.

To date, this grantee was supported with \$62,762, of which \$6,200 was awarded in FY 1975.

Epidemiology of Alcoholism in Latin America. Pan American Health Organization (PAHO), Dr. Marilyn Katatsky, Washington, D.C., 4/1/72 - 3/31/77.

The objectives of this 5-year grant awarded to PAHO are to:
(1) study drinking patterns in 10 Latin American sites to determine prevalence of alcoholism and heavy drinking in urban, semirural, and rural settings relating to type of beverage, age, sex, and cultural variables; and (2) establishment of Centers for Studies on Alcoholism.

To date, a pilot Center for Studies of Alcoholism has been established in San Jose, Costa Rica, funded in part through this grant and through the Costa Rican National Institute on Alcoholism. The Center has completed several research projects and has developed a number of other research and prevention efforts. The Center's library is now operational and is providing services to researchers in Costa Rica and other Latin American countries. Endeavors are continuing for development of a similar viable Center in Brazil and, toward this end, an agreement has been signed between PAHO and the State of Sao Paulo. In addition, the Education Project has launched a nationwide program in the elementary schools. Data from a survey of drinking attitudes and behavior have been collected for six sites and are in process of being analyzed.

Since alcohol abuse and alcoholism are particularly devastating in Central and South America, this grant represents a mutually shared cooperative effort to understand the causes of alcoholism in Latin America and to develop education, prevention, and treatment programs.

To date, this grantee has been supported with \$864,187, of which \$165,187 was awarded in FY 1975.

Alcohol and Aldehyde Metabolizing Dehydrogenases. Jean P. von Wartburg, University of Bern, Switzerland, 2/1/74 - 1/31/77.

Earlier research indicated that some enzymes responsible for metabolism of alcohol do not have the typical form and that metabolism may be under genetic control. The objective of the present grant is to conduct detailed studies of isoenzymes of aldehyde dehydrogenase and aldehyde reductase. This is an extension of Dr. von Wartburg's prior studies of the alcohol dehydrogenase investigating a new inhibitor of the enzyme (Aminorex) and its various substrates. The project also plans to assess biochemically aldehyde dehydrogenase and reductase, primarily in brain, for clues on the local cerebral metabolism of alcohol and its effect on the pathogenesis of withdrawal and tolerance to alcohol.

His studies to date appear to support the conclusion that ethanol administration had a profound effect on biogenic amine metabolism at several levels, and this would indicate that certain changes in

physiologic functions which result from chronic ethanol ingestion are mediated by the metabolites of the biogenic amines.

Studies under this grant have resulted in the isolation and characterization of four multiple molecular forms of aldehyde reductase from human brain and two forms from rat brain. In addition, a method for the determination of disulfiram and its metabolites in blood of patients treated with this drug has been developed which enables an evaluation of the timespan for effective medication.

The significance of the work by this investigator is in sorting out probable biochemical mechanisms initiated by alcohol in the nervous system. In addition, the development of diagnostic techniques and tests is of potential significance to clinicians.

To date, this grantee was supported with \$134,020, of which \$38,040 was awarded in FY 1975.

Prevention of Adverse Metabolic Effects of Alcohol. A. Hugo Theorell, Karolinska Institute, Sweden, 6/7/72 - 5/31/75. This grant has been extended for a fourth year of funding to April 30, 1976, and supplemental funds are under consideration.

The objectives of this work are to find a means of abolishing or eliminating metabolic damage of alcohol consumption by partial inhibition of alcohol combustion, using synthetic inhibitors of liver alcohol dehydrogenase (LADH) and to determine the total three-dimensional structure of LADH by X-ray crystallography.

The study has been aimed toward improving the basic understanding of how LADH works at the molecular level. It has been found that an inhibitor of LADH, 4-methyl-pyrazole, prevents liver damage (fat infiltration) caused by alcoholism in rats. Preliminary experiments indicate that a partial inhibition of ethanol oxidation by 4-methyl-pyrazole counteracts the liver triglyceride accumulation in rat and dog. Further synthetic work has revealed pyrazole derivatives that are much stronger blocking agents than 4-methyl-pyrazole.

A major significance of the work under this grant lies in the more complete understanding of the three-dimensional structure of the ternary complexes of ADH with coenzyme and blocking agents or substrates as a result of the excellent X-ray crystallographic work being done by the investigators.

To date this grantee was supported with \$347,789. No additional funds were obligated in FY 1975. Further support is under consideration.

Brain Stimulation and Alcohol Preference. Roy A. Wise, Sir George Williams University, Canada, 5/1/72 - 4/30/75 (completed).

The objective of this project was to identify the neural substrates underlying the phenomena by which electrical stimulation of the lateral hypothalamus elevates normal ethanol intake in rats.

The significance of the work is in developing and analyzing an animal model for human alcoholism, achieving improved understanding of the neural mechanisms involved in voluntary ethanol intake.

This project was completed April 30, 1975. The grantee was supported with \$46,930.

Ethanol-Induced Changes in Brain Mitochondria. S. French, University of British Columbia, Canada, 3/1/72 - 2/28/75 (completed).

The objective of this project was to determine the mechanisms of ethanol depression and ethanol withdrawal hyperactivity of the central nervous system.

The results of this work support the subsensitivity-supersensitivity concept of drug tolerance-dependency. That is, ethanol ingestion causes tolerance and subsensitivity by increasing norepinephrine at the postsynaptic membrane receptor site which causes a decrease in the cyclic AMP response of the brain to NE in vitro.

Over 10 journal articles have been published or are in press. Although the work under this grant has been completed, the investigator is conducting further studies on this topic under a new grant (No. AA-02294) awarded to the Veterans Administration Hospital, Martinez, California.

This project was completed August 31, 1975. The grant was in the amount of \$96,415.

International Research Contracts:

Review of Alcoholic Beverages in the Etiology of Certain Cancers in Man. International Agency for Research on Cancer, World Health Organization, Dr. J. Higginson, Lyon, France, 6/28/75 - 3/31/76.

The objective of this work is to utilize various international sources of data to review the relation of alcohol consumption to certain cancers in man. This involves, more specifically, the following: long-term prospective studies collecting detailed information from individuals; comparison of hospital data with various control groups; examination of the relation between disease states, such as cancer sites or cirrhosis, and aggregate indices of alcohol consumption at region, state, or country levels; exploration of mortality trends over periods of time in which rates of alcohol consumption varied widely, as in France, Finland, and Norway; comparison of special subpopulations, e.g., Copenhagen Brewery workers,

with control groups; and analysis of alcoholic beverages to identify and determine the amounts of potential carcinogens present.

In their most recent meeting, the investigators agreed that associations, with different degrees of certainty, exist between alcohol and cancers of certain sites, i.e., buccal cavity and pharynx, urinary bladder, stomach, esophagus, colon, rectum, liver, pancreas, and larynx. In addition, certain research principles were enunciated including: (1) use of objectively defined alcohol consumption; (2) joint investigation of other alcohol-related diseases along with cancer, and other possible etiological factors for cancer along with alcohol; and (3) focus of study on those populations that can be defined as to their alcohol intake, that are known to consume one main type of alcoholic beverage, that can be traced adequately in existing mortality or morbidity filing systems, and that can be compared to groups of nondrinkers.

The total amount of this contract is \$259,650, of which \$158,050 was awarded in FY 1975.

International Working Symposium on Alcoholism Research in Industrialized Countries. International Council on Alcohol and Addictions, Archer Tongue, Lausanne, Switzerland, 6/74 - 6/75.

The objective of this contract was to convene an international working symposium on alcoholism research in industrialized Nations to discuss priorities and allocation of resources for research, existing treatment services, and communication systems.

The Report of the Symposium concluded that the lack of fundamental knowledge in certain areas prevented agreement on definitive answers to some of the issues raised in the agenda. Participants were not prepared to force a solution on priorities. They did, however, identify certain areas where research effort should be further encouraged. These include: (1) the elucidation of biological factors with influence ethanol intake; (2) an investigation of those processes which are involved in habituation and dependence on ethanol; (3) a selective investigation of certain pathological conditions related to the chronic over-consumption of ethanol; (4) epidemiological studies; (5) the evaluation of therapy; (6) a study of the effects of legal and economic changes on alcohol consumption and related programs; (7) a refinement of research instruments and methodology; (8) the clarification of concepts and terminology; (9) the definition of the various types of alcoholism and alcohol abuse; and (10) the identification of treatment goals and criteria for the evaluation of treatment.

This contract was awarded in FY 1974 in the amount of \$27,190. No additional funds were awarded in FY 1975.

Criteria for Identifying and Classifying Disabilities Related to Consumption of Alcohol. World Health Organization (WHO), Dr. T. A. Lambo, Geneva, Switzerland, 5/74 - 12/75.

The objective of this contract was to develop methodology and conduct a study to formulate international criteria for detecting and classifying disabilities related to alcohol consumption.

The approach that was developed and forms the basis of the WHO Report emphasizes the concept of alcohol dependence as a diagnosable condition of great importance; it rejects the notion that alcohol dependence is some sort of monolithic and all-or-none condition with only one presentation whatever the culture; it emphasizes the importance attached to analysis of alcohol-related disability itself; it emphasizes the need to recognize that not all alcohol-related disability is alcohol-dependence related; it discards the notion of "problem drinker" as a category of any certain meaning; and it emphasizes the importance of interacting personal and environmental factors.

The total amount of this contract was \$40,500, of which \$10,000 was awarded in FY 1975.

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